

FINAL REPORT

**A REVIEW OF
DAYLIGHT, VIEW & PRIVACY
STANDARDS**

**for the City of Toronto
Department of Planning and Development**

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ARCHITECTS**

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April 29, 1992

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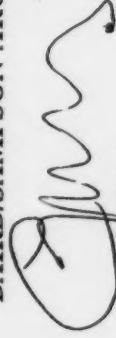
Dear Ted:

**Re: Daylight, View and Privacy Study
Final Report**

Enclosed please find our final report on the above study. We believe that all issues that have been discussed in recent meetings with your group have now been incorporated in the document.

Yours truly,

BAIRD/SAMPSON ARCHITECTS



George Baird

BAIRD / SAMPSON
ARCHITECTS

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PART ONE INTRODUCTION

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Part 1: INTRODUCTION

The purpose of this report is to provide an overview of our findings in respect to the Daylight, View and Privacy Study which you have commissioned from us. It includes review of regulations in respect to issues of daylight, view and privacy as we have identified them in other jurisdictions; an outline of the problems in respect to daylight, view and privacy which we see in the finalized group of case studies of currently or recently proposed projects in the city; as well as conclusions and recommendations.

A summary of its overall contents is as follows:

Comparison between current Toronto regulations and Guidelines and those in other jurisdictions

Part 2 following provides a summary of our work reviewing relevant material in other jurisdictions.

Overall, there appears to be relatively little regulation in other jurisdictions which is relevant to these issues. Many guidelines and regulations have been developed in recent years in a number of jurisdictions which seek to protect light and sun as they reach streets, street sidewalks and other public open spaces, but very little has been developed in respect to daylight, view and privacy as they bear on individual dwelling units and

even less, as it bears on office space. In our enquiries, we were sometimes referred back to Toronto itself, upon approaching contact persons in other jurisdictions.

To the extent that requirements for daylight, view and privacy do exist, they generally take one of three forms. First is the oft cited, but rarely emulated, "ancient lights" provisions developed in London, England. This is a provision which stipulates that a property owner may be entitled to a "right-to-light" if the light in question has been provided for a certain number of years. In certain cases, this right may take precedence over an adjoining owner's right to build. Needless to say, such an approach is highly particular and historically grounded, and as much a matter of legalities between owners, as one of municipal regulation. We have been able to find no other jurisdiction which has attempted to emulate the British standards. Rights to light based on the British model used to pertain in Ontario, as David Estrin and John Swargen's Canadian Environmental Law Research Foundation, Toronto, 1978, "Environment on Trial" states:

"The right to light and air was originally based on the duty of one neighbour not to create a nuisance that would interfere with other neighbours' enjoyment of their land. Eventually the right of one person to use the air and sunlight flowing across his neighbour's land developed into an 'easement'. In general, if a building continuously

received sunlight and air flow for twenty years, the adjoining landowner lost his right to obstruct that light and air flow to an unreasonable extent. To prevent a neighbour from ever obtaining such rights over their lands, some owners erected screens to block out the light from the start. In Ontario, the Legislature and the courts saved developers the trouble of going to such extremes by abolishing any rights to air or light their neighbours might acquire over time. Such rights were perceived as unduly restrictive to development in a young and apparently vast province. The Chief Justice of Ontario expressed this view, speaking in 1877:

"The law which provides that a man by the exercise of rights on his own land shall thereby in the course of a time acquire right over the land of another, is not a law to be favoured in a new country where population is not so dense as in the older countries of Europe, and where the rapid growth of cities, towns and villages is without parallel in Europe."

In the neighbouring states of New York, Massachusetts; Maine, Connecticut, Maryland, Pennsylvania and South Carolina, which are supposed to have derived their laws from the law of England, the doctrine of gaining prescriptive right to light by mere length of enjoyment has been abandoned as being unsuited to the wants and circumstances of the country."

The Ontario Legislature must have reached a similar conclusion, for in 1880 what is now section 33 of the Limitations Act was passed, preventing anyone from acquiring a right to the access and use of light or air for any 'dwelling-house, workshop or other building' by twenty

years' use after 1880."

The second form of regulation - the one which has historically been most common in North America - is indirect protection, via the mechanism of mandated setbacks - front, side and rear - as well as (sometimes) height limits. Most jurisdictions employ requirements of this kind for low to medium density residential neighbourhoods. We have even discovered that New York City has traditionally used such requirements for high density residential as well. And of course, prior to the development of Toronto's current light, view and privacy guidelines, Toronto used such techniques in its lower density residential zoning by laws also. Recently New York City has refined its system, to add the device of the "sky exposure plane" but this really amounts to a further height/setback requirement, simply expressed in another way.

Finally the third form of daylight view and privacy requirement is that manifested in Toronto's existing guidelines, which were in turn based closely on the conceptual methodology of the CMHC's long established Site Planning Criteria. This form of guideline differs fundamentally from both the ones discussed above, in that it is structured around conditions as they bear on any given window (primary or secondary, according to the terminology) of a residential unit, rather than being generated

from either overall building form or from lot boundaries.

It would appear from our survey that no other forms of light view and privacy guidelines exist.

It is interesting also to note that relatively few jurisdictions appear to attempt to deal separately with the issues of daylight, view and privacy respectively. As the summaries in Part 2 of the document make clear, most jurisdictions seek to protect all three conditions by one set of requirements, even when they separate them out in a statement of intention. In a very few cases, daylight (Great Britain) and view (San Diego) have been dealt with on their own.

Case Studies

We have conducted preliminary investigations of 15 case study sites in Toronto and the results of those investigations comprise Part 3 of this report. We have found the 15 to cover a wide range of approaches to design, and to represent a wide range of issues for daylight, view and privacy. The documentation which follows tests the case studies against the existing guidelines and the proposed regulations and discovers that they fall into 4 broad categories. These are as follows:

- a. Schemes which meet the current guidelines but which may or may not need relatively minor modifications to comply with the proposed regulations.

A few of the case studies we examined appear to raise no issues for this study. The project for 1400 Bathurst Street, for example, falls into this category.

- b. Schemes which can be made to comply with the current guidelines as well as the proposed ones with relatively minor modifications.

The case studies also encompass a group of projects which would need to be modified to meet the guidelines, but appear to be modifiable without drastic changes to their configuration or - in all likelihood - to their economic viability. The proposed project for 21 Carlton Street probably falls into this category.

- c. Schemes which require major modification to comply, but which appear to be more-or-less sustainable in a form close to that proposed.

The projects for 69-71 Lombard Street, and for 5-9 Sultan St. probably fall into this category.

- d. Schemes which are only able to be sustained with major modifications, and (often) at lesser densities than their proponents have attempted.

Projects such as 300 Bloor Street East fall into this category, as does that for 30 Charles Street and 636 Bay Street.

We have undertaken more detailed alternative studies of the sites at 415 James Street, 300 Bloor Street East and 30 Charles Street. The results of these studies are included at the end of Part 3.

PART TWO,

COMPARISONS BETWEEN
CURRENT TORONTO
REGULATIONS AND
GUIDELINES AND THOSE IN
OTHER JURISDICTIONS

Part 2: COMPARISONS BETWEEN CURRENT TORONTO REGULATIONS AND GUIDELINES AND THOSE IN OTHER JURISDICTIONS

Regulations and guidelines concerning daylight, view and privacy were examined in current Toronto documents, as well as in a series of other jurisdictions. The total list is as follows:

1. Toronto, Zoning Bylaw
2. Toronto, Guidelines concerning light view and privacy
3. City Plan '91, Living Downtown in Toronto
4. City Plan '91, Sun, wind and pedestrian comfort
5. C.M.H.C., Site Planning Criteria
6. Ontario Building Code
7. Ottawa
8. Calgary

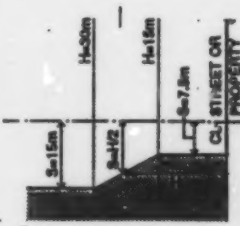
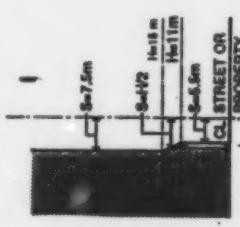
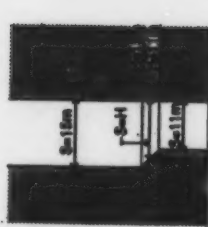
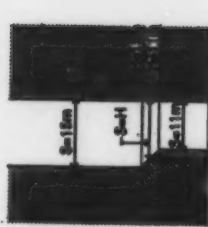
9. Winnipeg
10. Edmonton
11. New York City
12. Boston
13. San Francisco
14. San Diego
15. Great Britain

Chicago and Montreal were also approached for information.

Jurisdiction/ Source of information	Form of Guidelines or Regulations	Applies to Residential or Non-residential	Daylight, View and Privacy	Boundary Condition/ Existing buildings	Similar to what other jurisdiction or source
Toronto, Zoning Bylaw	skeleton regulations, intended originally to be interim	residential in CR and QR districts only	1 Light, view and privacy 1.1 •The main window of a dwelling unit is to be setback 15 metres from the main living room window of another dwelling unit, on the same property. •The main window of a dwelling unit is to be setback 11 metres from a habitable window of another dwelling unit, on the same property. •The main window of a dwelling unit is to be setback 7.5 metres from a wall or a property line that is not on a street or a park.		

Toronto, Background report prepared in 1977, regarding light, view and privacy	explanation of the principles regarding light, view and privacy; superseded by the guidelines report (following) but sometimes used instead of it because it is easier to understand.	residential	The principles contained in this report evolved into the ones explained below in the Guidelines report.		C.M.H.C. in the use of setbacks from windows, not walls, and the use of privacy zones C.M.H.C., Winnipeg, Edmonton in that setbacks are based on windows, and in the different- iation between window types
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Jurisdiction/ Source of Information	Form of Guidelines or Regulations	Applies to Residential or Non-residential	Daylight, View and Privacy	Boundary Condition/ Existing buildings	Similar to what other jurisdiction or source
Toronto, Guidelines report regarding light, view and privacy	guidelines, , only enforceable when an application is made for densities greater than as-of-right	residential	1 A very simple skeletal set of regulations is included in the Zoning Bylaw to protect light, view and privacy. It was the intention that a more exhaustive set of regulations would be developed, and that the Bylaw would be amended in future to incorporate them. This report consists of the proposals for those amendments. 2 Light, view and privacy 2.1 Guidelines are based on a) type of window: either primary, habitable, or non-habitable; b) what the window faces: either another window, a blank wall or an open space; and c) height of window, measured from the lowest residential floor, not the ground, and in some cases d) whether there is a view from the window or not. In essence they comprise the following conditions on the following page. 2.2 This is one of the few sources that deals with view, on it's own merits. Views from the primary window only of a residence is to be protected. 2.3 If a privacy window is less than 2m above grade, and faces a public open space, then setback is to be 3m if there is screening and 5m if there is not. 2.4 If a window faces an adjacent existing building which is not set back for the common property line sufficiently, then the new building should be set back as though both were on the same property, provided that density is not compromised. 3 Form and presentation of the Guidelines report 3.1 It is fair to say that the Guidelines report has not been employed to date as much as it could have been, partly because the principles contained in it are guidelines only, but also due to the fact that it is a complex document to employ on a daily basis.		C.M.H.C. in that setbacks are based on windows rather than walls, and in the concept that if a window is more than 2m off the ground, then privacy is protected

Jurisdiction/ Source of Information	Form of Guidelines or Regulations	Applies to Residential or Non-residential	Daylight, View and Privacy	Boundary Conditions/ Existing buildings	Similar to what other jurisdiction or source
			 PRIMARY WINDOW FACING SIDE OR REAR LOT LINE, CENTRE LINE OF A STREET OR LANDS ZONED 'O'.		
			 SECONDARY WINDOW FACING SIDE LOT LINE, CENTRE LINE OF STREET OR LANDS ZONED 'O'.		
			 PRIMARY WINDOW FACING ANY WALL WITH OR WITHOUT WINDOWS WITHOUT VIEWS PAST THAT WALL	← SAME AS PRIMARY WINDOW	
			 SECONDARY WINDOW FACING A WALL WITH A MAIN LIVING ROOM WINDOW, SAME LOT.		
			 PRIMARY WINDOW FACING A WALL WITH A VIEW PAST IT FOR 46m (150') MINIMUM		
			 SECONDARY WINDOW FACING ANY OTHER WALL		

Jurisdiction/ Source of information	Form of Guidelines or Regulations	Applies to Residential or Non-residential	Daylight, View and Privacy	Boundary Condition/ Existing buildings	Similar to what other jurisdiction or source
Cityplan '91 <u>Living Downtown in Toronto</u>	Review of the Official Plan for the central area, Guidelines to the Planning Department re. future regulations	Residential only, primarily in mixed-use zones	1.1 Relation of daylight, view and privacy to density Less emphasis should be put on density as a controlling factor for development, and more emphasis should be put on factors that affect the living environment and that lead to predictable built form. 1.2 Regulating environmental conditions like light, view and privacy is necessary therefore, but only regarding sun access to streets and public spaces. Light, view and privacy in the interior of buildings tends to be demanded and protected by market forces. 2 Setbacks 2.1 Setbacks on the side or rear of a building should relate to placement of windows, not simply to walls. 2.2 The report proposes build-to lines, (maximum setback limits) similar to New York City where building faces setback above a specified streetwall height. 3 Form of regulations 3.1 Rules for daylight, view and privacy must be firm regulations part of the as-of-right zoning bylaw.		Cityplan '91, Sun, Wind and Pedestrian Comfort study, New York City, San Francisco in the emphasis on sun access to streets, and the promotion of streetwall heights with setbacks above. C.M.H.C. City of Toronto Bylaw and Guidelines etc. in the basing of setbacks on windows rather than walls. O.B.C in the measuring of building height in storeys rather than metres.

Jurisdiction/ Source of Information	Form of Guidelines or Regulations	Applies to Residential or Non-residential	Daylight, View and Privacy	Boundary Condition/ Existing buildings	Similar to what other jurisdiction or source												
Cityplan '91 <u>Sun, Wind and Pedestrian Comfort</u>	recommend- ations to the City of Toronto Planning Department re. future regulations	public streets in the central area	1. Light 1.1 Light was approached in terms of sun access to streets and public open spaces only. Sun access into residential units above street level is taken care of then indirectly. 1.2 A classification system of streets is proposed based on hours of sun access at spring and fall equinox: •3-hour time window: this is the minimum amount of sun access in any downtown street, and would be typical for business streets. •5-hour time window: for promenades, main streets and medium density mixed use streets, for example Bay Street, Church Street at Wellesley, Harbourfront. •7-hour time window: for low density residential streets. 1.3 <u>Sun angles:</u> Sun angles are set for each of the time windows for north/south and east/west streets: <table><tr><td></td><td>north/south streets</td><td>east/west streets</td></tr><tr><td>3-hour window</td><td>60°</td><td>44°</td></tr><tr><td>5-hour window</td><td>44°</td><td>40°</td></tr><tr><td>7-hour window</td><td>30°</td><td>37°</td></tr></table> These sun angles determine the allowable streetwall height of any building and setbacks above that height, by being projected up from the curb of the sidewalk across the street to the property line of the building in question, and beyond.		north/south streets	east/west streets	3-hour window	60°	44°	5-hour window	44°	40°	7-hour window	30°	37°	Regarding the question of whether a proposed building is obliged to adhere to (possibly constraining) sun access angles in order to prevent casting shadows onto an area which is anyway overshadowed by another adjacent building, the report argues firmly that each building must act responsibly or otherwise built form will be unpredictable.	New York City in the use of streetwall heights and inclined planes. Cityplan '91, <u>Living Downtown in Toronto</u> in the emphasis on sun to streets.
	north/south streets	east/west streets															
3-hour window	60°	44°															
5-hour window	44°	40°															
7-hour window	30°	37°															

continued . . .

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			2 Compatibility of proposed sun access regulations to current zoning densities 2.1 Up to 4 x coverage (low and medium density), the 3-hour and 5-hour sun windows don't restrict density. Only above 4 x coverage does sun access affect floor layouts, because that is generally the threshold above which setbacks occur. 2.2 Medium and high densities are not constrained if lots are large. Smaller lots are constrained though, especially on southeast and southwest corners of intersections. 2.3 12 x coverage is not attainable without sacrificing comfort. 10 x is the maximum. 3 Form of regulations 3.1 The report argues against performance standards because they are difficult and expensive to administer and demand increasing amounts of high-tech accuracy that is starting to be beyond the reach of lay applicants. 3.2 Rules must be regulations, not simply guidelines that are only enforceable when an applicant is negotiating for permission to build more than as-of-right. 4 View and privacy were not part of the terms of reference of the report.		

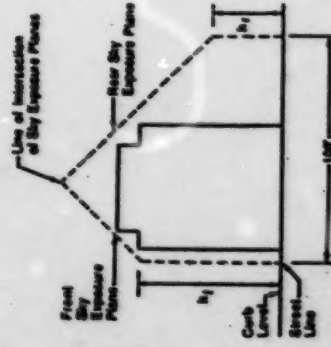
Jurisdiction/ Source of Information	Form of Guidelines or Regulations	Applies to Residential or Non-residential	Daylight, View and Privacy	Boundary Conditions/ Existing buildings	Similar to what other jurisdiction or source
C.M.H.C Site Planning Criteria	mandatory 'regulations for assisted housing advisory for market housing	residential	1 Light, view and privacy 1.1 The C.M.H.C regulations are based on setbacks from windows, and as such have a three tiered structure: setbacks from the residence's one principal habitable window, from other habitable windows and from non-habitable windows. 1.2 The following separation spaces are to be provided along the entire length of the wall of the room and contained wholly on the property: •in front of the wall having the primary habitable window: 8 metres, •in front of a wall having a habitable window: 5 metres, •in front of a wall having a non-habitable window: 1.2 metres + 300 mm for each storey above the 1st, up to 3 metres. 1.3 If the building faces an open space or street, then these may be located within the separation space if the following privacy zones are provided: •in front of the wall having the primary habitable window: 4.5 metres, •in front of the wall having a habitable window: 3 metres, •in front of a wall having a non-habitable window: no regulation. 1.4 There is no privacy zone requirement for windows more than 2 metres above ground.	No proposed housing should "deprive" any existing building or open space of light.	Winnipeg, Edmonton, Toronto, in the emphasis on window type

Jurisdiction/ Source of information	Form of Guidelines or Regulations	Applies to Residential or Non-residential	Daylight, View and Privacy	Boundary Conditions/ Existing buildings	Similar to what other jurisdiction or source
Ontario Building Code, Parts 3 and 9	regulations, enforced through building permit application process	residential	1 Sun access through windows 1.1 Minimum glass areas are regulated, depending on type of residential room in which the window is located.		National Building Code.
	regulations enforced through building permit application	residential and non- residential	2 Code requirements that affect light, view and privacy indirectly 2.1 The area of window openings in a building face is regulated primarily for the reason of fire protection. As a result, the area is a function of area of exterior building face, limiting distance (setback), wall proportion: whether the wall is squarish or long and thin, and occupancy type. 2.2 The area of unprotected openings can be doubled in the building is sprinklered. 2.3 Area of exposed opening therefore, is related to many indirect factors that do not necessarily lead to predictable built form.		National Building Code

Jurisdiction/ Source of Information	Form of Guidelines or Regulations	Applies to Residential or Non-residential	Daylight, View and Privacy	Boundary Conditions/ Existing buildings	Similar to what other jurisdiction or source
Ottawa, Official Plan Amendment	guidelines	residential and non- residential	1 Light 1.1 Sun access into buildings and especially into public open spaces is promoted by broad generalizations of intentions. No quantitative standards are given. 1.2 Because it is the stated intention that the city develop specific requirements for sun access and openness to the sky, we conclude that none presently exist. 2 View 2.1 The question of view is approached only from the standpoint of views to important landmarks or views of nature from streets and public open spaces. 2.2 Views <u>into</u> lobbies and public non-residential buildings are promoted.		
Calgary, report to the Planning Depart- ment	amendments to the Land Use Bylaw regulations	residential	•A density cap of 7 FAR is used because "higher densities created undesirable impacts in terms of loss of daylight to dwelling units, the overshadowing of streets and open space and the loss of privacy." •Tower forms are encouraged rather than slabs to limit overshadowing and protect views. •A setback of 12 metres is required from towers to side or rear property lines.		Antithetical to Cityplan '91 <u>Living in Downtown Toronto</u> in the use of density to protect light, view and privacy.

Jurisdiction/ Source of Information	Form of Guidelines or Regulations	Applies to Residential or Non-residential	Daylight, View and Privacy	Boundary Condition/ Existing buildings	Similar to what other jurisdiction or source
Winnipeg, Downtown Winnipeg Zoning Bylaw	'regulations	residential	- Yard requirements are set from a: • wall with windows to a residential unit: min. 6m (20 ft) • wall with any other window: min. 3 m (10 ft) • wall with no windows: min. 2.5 m (8 ft) - Setback requirements are set out for similar categories of walls and windows, based on the size of the building face.		C.M.H.C. in the use of separation space based on walls with windows and those without
Edmonton, Land Use Bylaw	regulations	residential	• Light, view and privacy are protected by the use of landscaped yard, setbacks, separation space and minimum private amenity space requirements.		C.M.H.C. in the use of separation space requirements in front of walls with primary windows, privacy zone.
	discretionary requirement	non-residential	• Major developments in the downtown area may be required to do sun/shadow studies.		
	discretionary guidelines	residential, high density	• In the Oliver Redevelopment area, setbacks, amenity space, siting etc. will be evaluated on a site by site basis using a series of very generalized guidelines.		

Jurisdiction/ Sources of Information	Form of Guidelines or Regulations	Applies to Residential or Non-residential	Daylight, View and Privacy	Boundary Condition/ Existing buildings	Similar to what other jurisdiction or source
New York City Zoning Bylaw and Zoning Handbook	regulations	residential	1 Sky exposure plane 1.1 Generally, for buildings in zones with a permitted density greater than 2.0 F.A.R., use is made of both front and rear sky exposure planes. For any given zone a height above the property line is set from which a sky exposure plane angles up over the property. The slope of the sky exposure plane varies from a ratio of vertical to horizontal of 1:1 (45°) to 2½:1 (68°). Similarly a rear sky exposure plane rises from a specified height at a specified angle from a line 100 feet to the rear of the front property line. The building must step back to avoid penetration of both planes. In certain zones, minimum streetwall heights are set as well. 1.2 If a building is slender enough to satisfy the definition of a tower (if the footprint is less than 40% of site area) then it is permitted to penetrate the sky exposure plane. 2 Courtyards 2.1 Generally, inner courtyards are to be greater than 1 200 sq. ft. in area with neither horizontal dimension less than 30 feet across. 3 Setbacks 3.1 Generally, the minimum distance from any legally required window to a wall or a rear or side property line is 30 feet.		Cityplan '91, Living Downtown in Toronto; Cityplan '91, Sun, wind and pedestrian comfort, San Francisco in the use of streetwall heights and inclined planes to determine upper level setbacks



h_1 is the height at which the front sky exposure plane begins at the street line

h_2 is the height at which the rear sky exposure plane begins at the 100-foot line

Jurisdiction/ Source of Information	Form of Guidelines or Regulations	Applies to Residential or Non-residential	Daylight, View and Privacy	Boundary Condition/ Existing buildings	Similar to what other jurisdiction or source
Boston Zoning Code & Enabling Act	regulations. Discretion- ary when part of Development Review of large-scale develop- ments	both residential and non- residential	Shadow impact 1.1 In downtown areas designated as shadow impact areas, large developments requiring development approval must satisfy the requirement that shadowing created as a result of the proposed building must not exceed 2 hours between 8:00 a.m and 2:30 p.m at spring and autumn equinox, unless an as-of-right development itself would cast a shadow for a greater length of time. Height and setback 2.1 There are special height restrictions for lots within 100 feet of the Boston Common. 2.2 The minimum facing distance between towers taller than 155 feet is 125 feet. 2.3 For 28 streets listed, and three development areas in downtown, skiplane setback depths are set for a) street wall height, b) walls above 155 feet in height and c) walls above 235 feet in height.	The requirement that shadowing not exceed 2 hours is waived if shadows from an existing building already overshadow the area for more than 2 hours. A height limit can be exceeded if an adjacent building exceeds the height limit. The height limit would then be modified to be an average between the height of the neighbour and the actual height limit of the zone so that the proposed building would become a transition.	

Jurisdiction/ Source of Information	Form of Guidelines or Regulations	Applies to Residential or Non-residential	Daylight, View and Privacy	Boundary Condition/ Existing buildings	Similar to what other jurisdiction or source
San Francisco, Municipal Code	partially regulations, partially part of discretionary review for tall buildings, building adjacent to parks etc.	both residential and non- residential	1 Downtown core tower setback Above 100 feet, setback is determined by sloping line determined by height at 350 feet, increasing to 35 feet at 550 feet Above 350 feet, the setback is 35 feet Minimum 15 feet setback from interior property line or center line of street between top of building base and 100 feet No setback required 0 feet to top of building base which is 1.25 times width of street Interior property line or center line of street	One can apply to be exempted from sun access regulations if penetration of the sun access plane doesn't create additional shadows because the ground area in question is already covered in the shadow of another building.	Cityplan '91 Sun, wind and pedestrian comfort, New York City, in the use of streetwalls and upper level setbacks.

2 Setbacks

- 2.1 On specific streets in Chinatown and the downtown core streetwall heights are set and sun access angles are specified to determine setbacks above streetwall height.
- 2.2 On the remainder of streets in the downtown office core, design of buildings is to be done to minimize shadows provided development potential is not compromised.
- 2.3 The general model of development is streetwalls with upper level setbacks in order to maintain consistent street form.

3 Lot coverage

- 3.1 In Chinatown (mixed-use area) lot coverage is limited to 75% of the site area for the expressed purpose of maintaining light, air and view.

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San Diego, City Centre Plan	regulations	mixed-use downtown areas	1 Sun access 1.1 The issue of sun access in southern California has a different emphasis than in the other northern cities examined. Sun access is important for passive solar collection. Since the peak period of demand for direct sunlight for the purpose of heating is the winter, sunlight criteria are based on winter solstice, rather than the equinoxes. The angle of the sun's rays at noon on December 21 at San Diego's latitude is 34° which is used as one of the angles of setback in the designated sun access areas below. 1.2 Two areas of the downtown are designated as Sun Access Envelopes where the building envelope is controlled with the intention of protecting sun access to sidewalks across the street at winter solstice, and therefore also into residential units, by default. A streetwall height of 50 feet is set. Above that height on the east and west sides of the block, an angle of setback of 45° is applied, and on the north and south sides of the block the building must step back 15 feet from the streetwall. The Transition Envelope areas have the additional requirement that on the north side of the block an angle of 34° starting from 8 feet above the curb on the opposite side of the street is used to determine building face setbacks.	1. Along with the issue of solar collection comes right-to-light: the need to protect sun access even over adjacent property. There is some State legislation to do this, however this leads to a first-come first-right situation. Site planning guidelines are being set.	1.1 Great Britain, in the right-to-light and the right-to-view. 1.2 CityPlan '91 and New York City, in the use of streetwall heights and angles of sun access.

2 View

- 2.1** View in California is the issue of view concerns itself more with scenery (ocean etc.), than with view and privacy. In San Diego, the question of whether view easements should be regulated was examined and it was concluded that view is too subjective a thing to quantify and control, and that therefore, regulations concerning view should be limited to height and bulk limits.

Jurisdiction/ Source of information	Form of Guidelines or Regulations	Applies to Residential or Non-residential	Daylight, View and Privacy	Boundary Condition/ Existing buildings	Similar to what other jurisdiction or source
Great Britain	rights	both	1. Rights of light 1.1 An existing building may have statutory rights of light over adjacent property.		San Diego, in the existence of "rights to light"
Sunlight and Daylight Planning Criteria and Design of Buildings, by the Department of the Environ- ment, 1971	guidelines	both	2. Block spacing criteria 2.1 Daylight and sunlight criteria are used to determine whether a building or a complex of buildings is sited to provide sufficient daylight and sunlight between buildings inside residences. 2.2 Sunlight criteria: For the face of a residential building facing generally south (but including any direction between due west and south of east): a minimum of 3 hours of direct sunlight should reach every point of the building face 2 metres above the ground. Sunlight indicators: These are tools provided with the document to help determine the duration of sunlight, without requiring that the applicant has knowledge of sun angles etc.. They consist of three acetate overlays drawn at 1:200, 1:500 and 1:1250 scale that can be laid directly over a scale site plan to show the hours sunlight will reach a building and the hours another building may block sunlight. 2.3 Daylight criteria: The measure of daylight illumination, used for a) residential building faces facing generally north (but including any direction between due east and north of west) and b) non-residential building faces facing any direction. The daylight criteria is expressed in terms of a number like 0.84% or 0.97%. Daylight indicators: Again, these are graphic tools provided with the document to help determine if the daylight criteria are satisfied. They consist of three more acetate overlays drawn at 1:200, 1:500 and 1:1250 for residential and non-residential conditions (and three each for residential and non-residential plot boundary conditions) that can be laid directly over a scale site plan to test the daylight available at a given point on a building face.	1. Boundary conditions: Specific daylight criteria are set for property lines of proposed buildings to protect daylight to neighbouring properties, and additional daylight indicators are provided to determine this. 2. Existing buildings: Daylight indicators alone should not be used to measure the impact of a proposed building on an existing building. More accurate means are required that take into account reflectance of interior and	

Jurisdiction/ Source of information	Form of Guidelines or Regulations	Applies to Residential or Non-residential	Daylight, View and Privacy	Boundary Conditions/ Existing buildings	Similar to what other jurisdiction or source
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exterior surfaces,
 size of window
 openings, tree
 cover, room
 layouts etc..
 Also,
 consideration
 should be given
 to the life
 expectancy of
 the existing
 building and to
 whether the
 building itself is
 a "good
 neighbour" as far
 as sun access is
 concerned.

PART THREE CASE STUDIES INVESTIGATED

Fifteen case study sites in Toronto were investigated with respect to daylight, view and privacy. These are illustrated on the following pages grouped into four categories:

- a) Schemes which meet the current Guidelines, but which may or may not need relatively minor modifications to comply with the proposed regulations.
- b) Schemes which can be made to comply with current Guidelines and the proposed ones with relatively minor modifications.
- c) Schemes which require major modification to comply with current Guidelines, as well as with those proposed but which appear to be more-or-less sustainable in a form close to that proposed.
- d) Schemes which are only able to be sustained, with major modifications and (often) at lesser densities than their proponents have attempted.

- a) Schemes which meet the current Guidelines, but which may or may not need relatively minor modifications to comply with the proposed regulations.

1400 BATHURST STREET

Zoning

CR L1 U200, Mixed-use Commercial Residential,
Max. density of 2.0 x using the mixing formula,
14 m height limit

Site

This is a 2 623 m² site located on the west side of Bathurst Street at Helena Avenue below St. Clair Avenue, immediately south of where Vaughan Road diverges from Bathurst. It faces streets on three sides and the sides of houses on the fourth, to the west.

Proposal

This is an as-of-right proposal for 113 units of assisted housing in a 5 storey single-loaded building wrapped around three sides of a courtyard. The width of the courtyard (23 metres x 24 metres) is generous in relation to its height (14 metres). The building is essentially built to the property lines with windows on the three streets and a party wall condition where it abuts buildings on the fourth side.

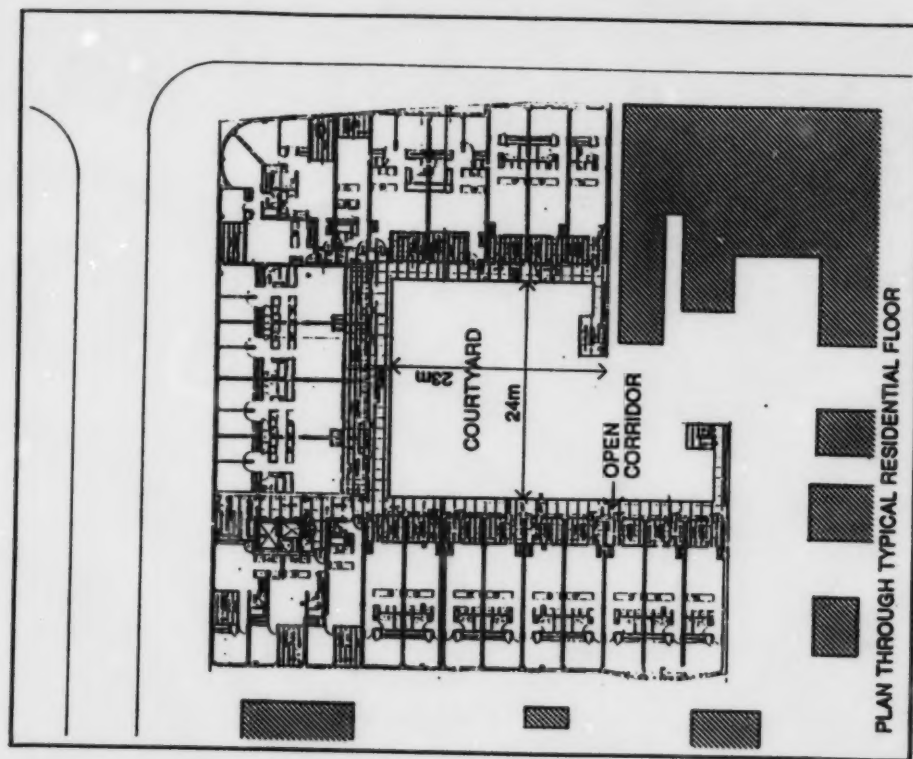
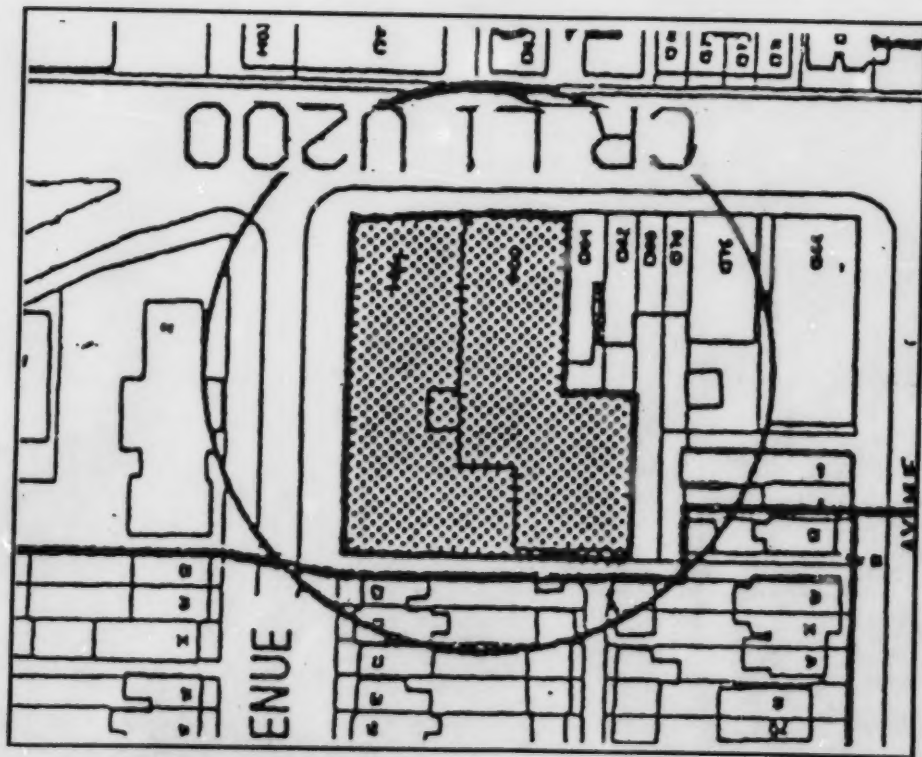
Implications for the findings of the Daylight View & Privacy Study

Under the current Guidelines:

•none

Under the proposed bylaw regulations:

- Assume regulations for setbacks to front lot lines apply to both Bathurst and Helena Streets.
- After conveyance of property to widen the back lane, the building face facing the lane would have to be set back a further 2 m in order to provide a 5.5 m setback from side property line to a residential wall with windows.



2401 YONGE STREET

Zoning

CR L2 U200, Mixed-use Commercial Residential,
Max. density of 3.5 x using the mixing formula,
14 m height limit

Site

This is a 5 360 m² T-shaped site with the end of the stem of the T facing with a narrow frontage onto Yonge Street, and with a wider area behind. There is a school on the east side of the site.

Proposal

This proposal is for two 5-storey and two 7-storey apartment buildings organized around a central open space, on top of a common underground parking garage. The building fronting onto Yonge Street has retail at grade. The central space is too wide to be considered a courtyard, and as a result there are no facing conditions that would not satisfy the light, view and privacy guidelines.

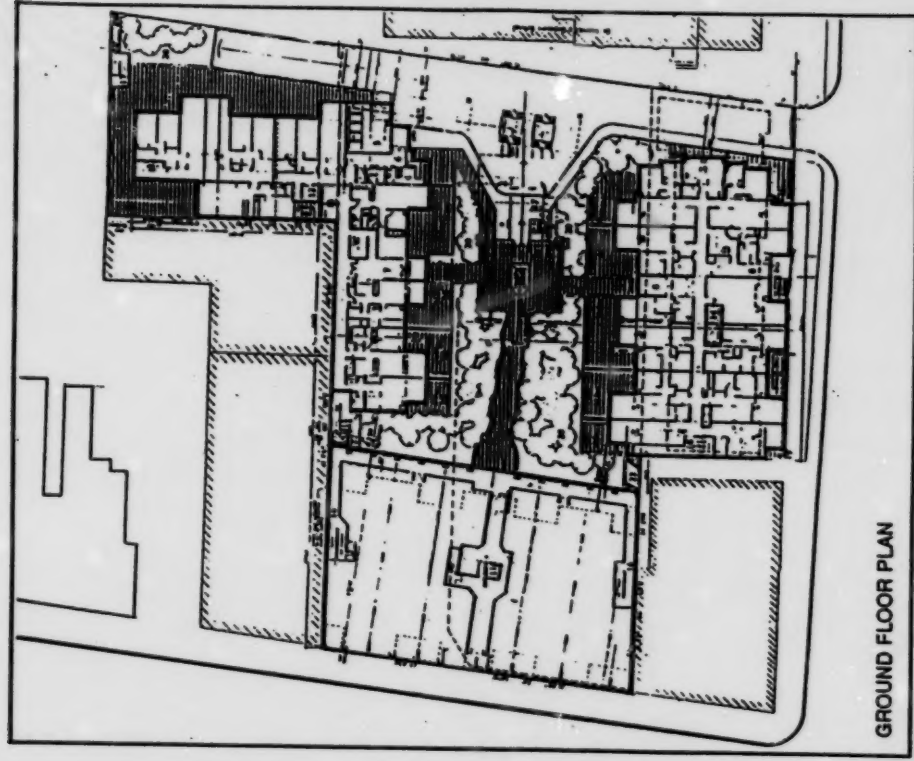
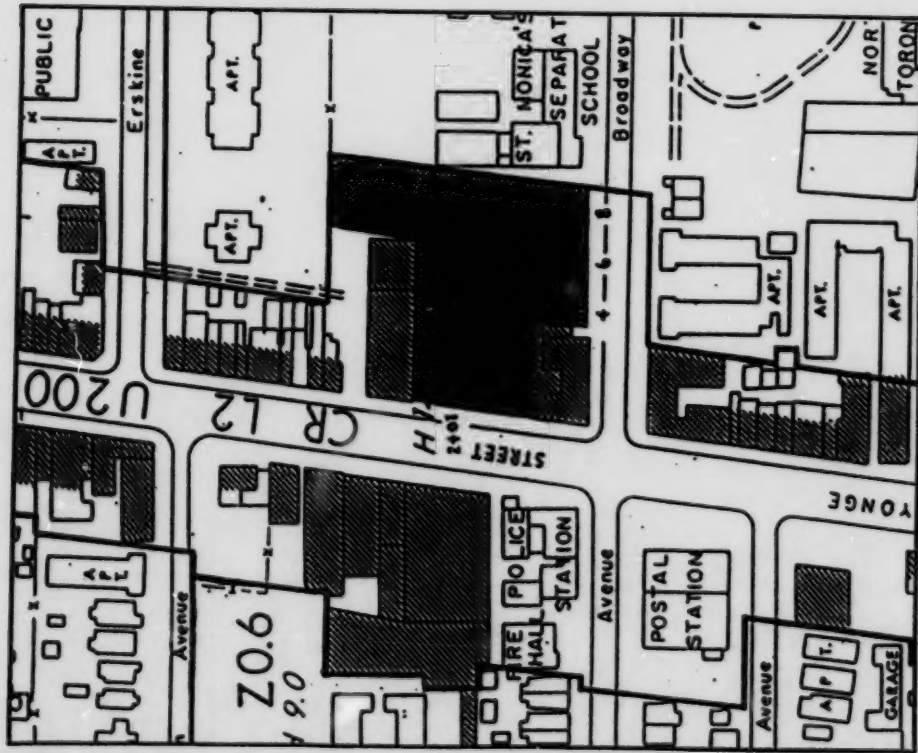
Implications for the findings of the Daylight View & Privacy Study

Under the current Guidelines:

•none

Under the proposed bylaw regulations:

•none



GENERIC DANFORTH SITE

Zoning

Hypothetically, 3.0 x f.s.i., Mixed-use Commercial Residential, with a height limit of about 18 metres.

Site

This is a site 2 700 m² in area located on the south side of Danforth Avenue at the intersection with a major north-south street. The property has 64 m frontage onto Danforth and is 42 m deep.

Proposal

The proposal is for a mixed-use building with 5 storeys of residential above street level retail on Danforth. The building has an east-west block on Danforth and three wings that extend south like fingers and create 10.8 metre wide courtyards in between. The light, view and privacy Guidelines report would normally require a 15 metre setback from a primary window in such a courtyard. This can be reduced to 11 metres however because the lowest residential floor is in the top 15 metres of the height precinct.

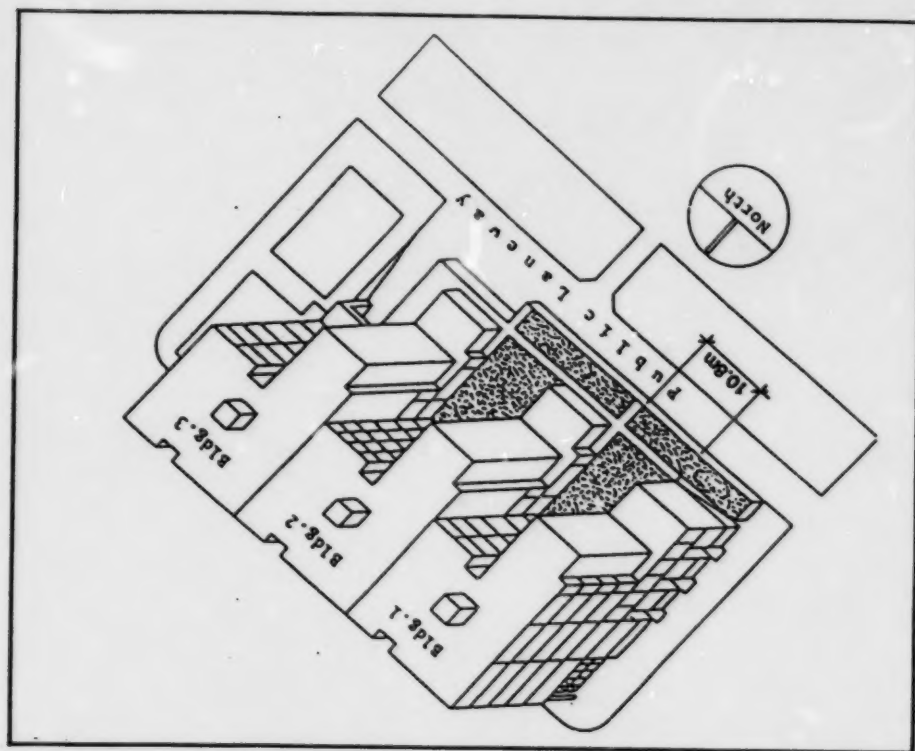
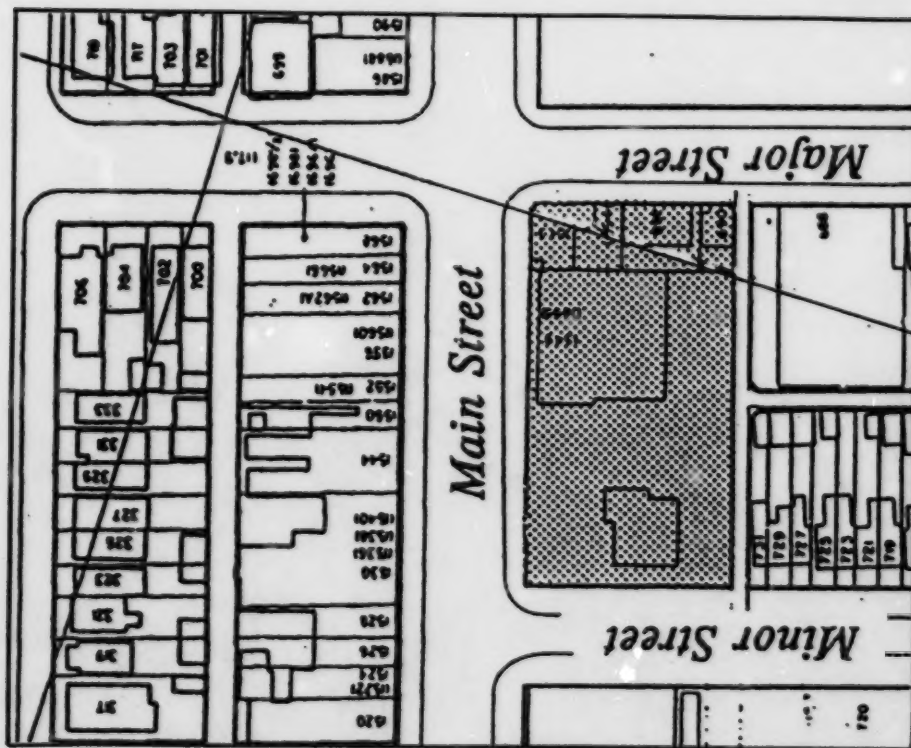
Implications for the findings of the Daylight View & Privacy Study

Under the current Guidelines:

•none

Under the proposed bylaw regulations:

•none



Zoning

CR L8 U480, Mixed-use Commercial Residential,
Max. density of 12.0 x using the mixing formula,
no height limit

Site

This 785 m² site is found on the north west corner of Bay Street and Wellington, immediately south of the new "Toronto Dominion 5" Stock Exchange tower, in the Financial District, where there is currently a 3-storey office building. The new 31 storey TD-5 building is built essentially to the common property line, with glazing on all sides.

Proposal

This proposal is for a 15 storey office building which nearly covers the whole of the small site and rises straight up from the base to the cornice. Because it is built to the side property line adjacent to the TD-5 tower, it creates a party wall condition even though the existing tower has windows on that face.

220 BAY STREET

Implications for the findings of the Daylight View & Privacy Study

Under the current Guidelines:

- The issue here is simply that the existing adjacent building has windows on the property line. The new building being proposed at 220 Bay doesn't cause any problems in itself. Thus it is our view that for there to be an implication for light, view and privacy it would have to be the case both that:

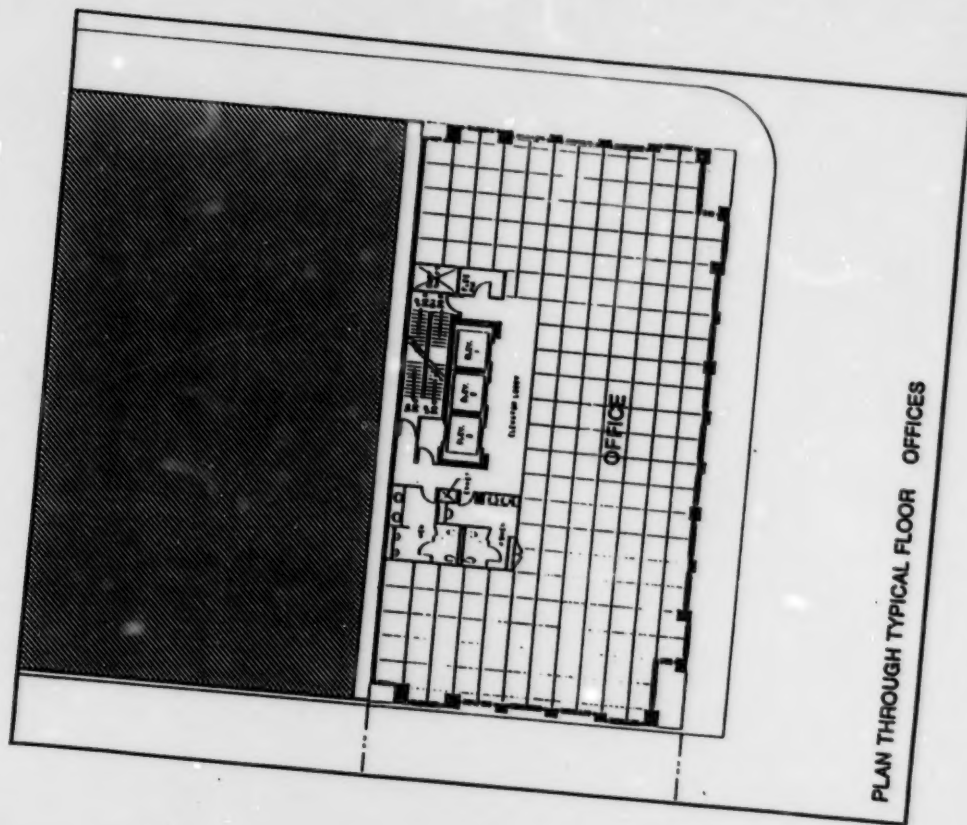
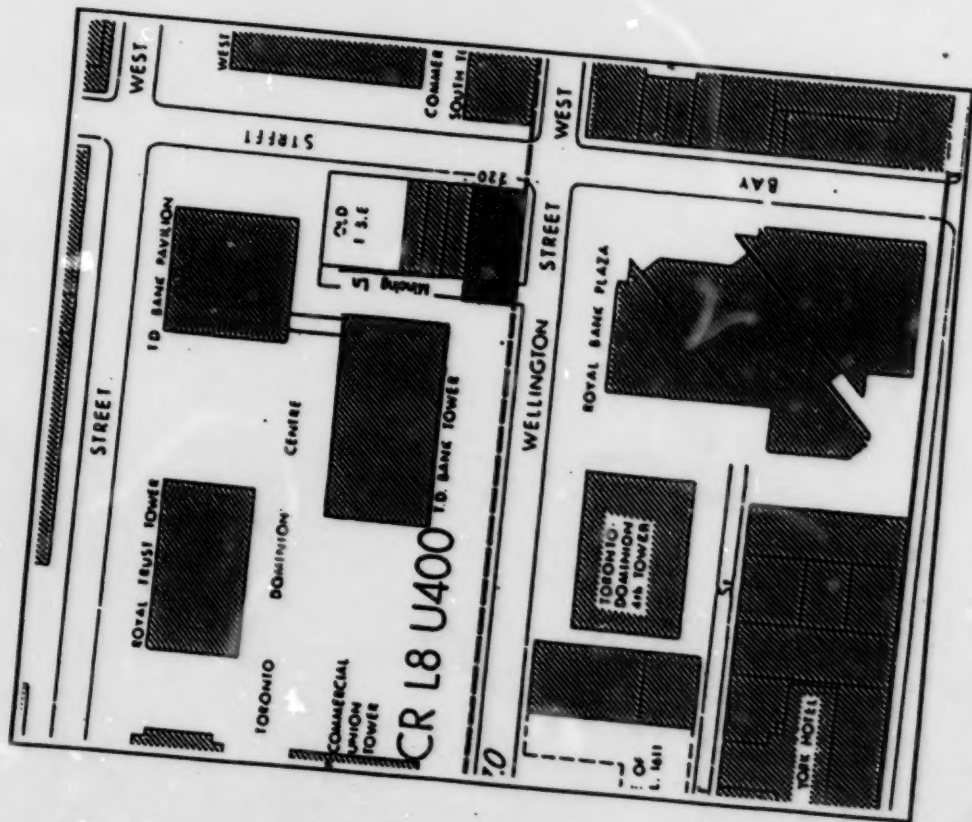
- a) Daylight, view and privacy standards for non-residential buildings should be implemented, and
- b) that a new building should be required to make good the deficiency of an adjacent existing one.

It has been our conclusion that such standards should be implemented for new buildings, but that they should not be required to make good the deficiencies of existing ones.

Under the proposed bylaw regulations:

- North side: above a height of 20 m above the ground (7 stories approx.), the party wall would have to be set back 5.5 m from the property line. The length of this wall is approx. 34 m, which slightly exceeds the proposed regulations' 30 m length-of-wall condition. It is assumed that an exemption would be possible through the Committee of Adjustment.

- However, the above ignores the Financial District exemptions.



PLAN THROUGH TYPICAL FLOOR OFFICES

- b) Schemes which can be made to comply with current Guidelines and the proposed ones with relatively minor modifications.

Zoning

CR L8 U400,

Max. density of 12 x using the mixing formula,
No height limit.

Site

This is the old Nag's Head Tavern site: a 460 m², 9 metre wide through-site fronting onto King Street to the north and Melinda to the south, between Yonge Street and Bay, in the Financial District. The site is flanked by a Toronto Dominion building to the east which is built to the property line, and a Montreal Trust building to the west which is built to within about 3 feet of the property line.

Proposal

The proposal is for a 40 storey, 55 unit condominium building with a height of 129 metres, and as such requires rezoning. Though the proposed building is taller than its neighbours, its height has been studied by the Planning Department and it is considered to be compatible with the other towers in the area. The broad sides of the building are not considered to create undue shadowing because most of the area is already in shadow most of the day. Levels 7 to 20 (2nd to 15th residential floors) have rounded glazed corners on the north west and south west corners which result in windows facing directly onto the side property. (The Toronto Guidelines report and the Zoning Bylaw require a 7.5 m setback from primary windows to the property line.) Also, the street faces of the building rise straight up with no setback.

5 KING STREET WEST

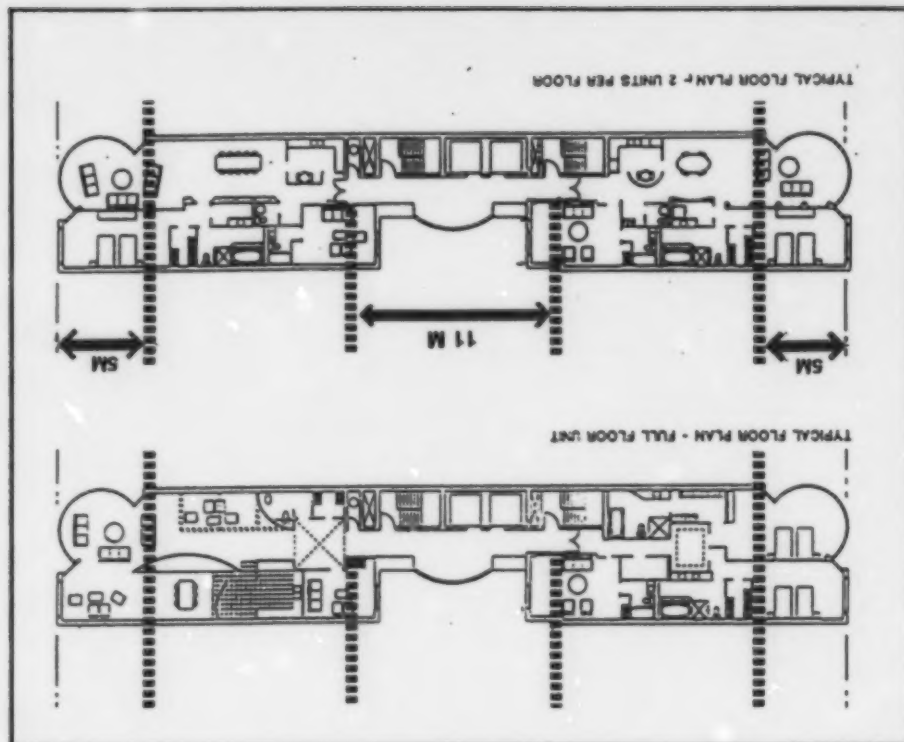
Implications for the findings of the Daylight View & Privacy Study

Under the current Guidelines:

- requires light-well proposed to be 15 metres minimum depth rather than ± 11 metres at a height of 15 metres above the lowest residential floor.
- requires front faces of both north and south facades to be set back 5 metres.
- N.B The GFA per unit in this scheme is so high that we suspect that no loss of units would be caused by this modification. The units would simply be smaller.
- N.B The 5 metre front and rear setback eliminates also the windows abutting the side lot line showing in the existing scheme.

Under the proposed bylaw regulations:

- Fronts on both Melinda and King Streets: the building face would have to step back up to 7.5 m from the property line at a height of 35 m from the ground.
- Sides: on both sides blank walls extending less than 30 m from King and Melinda would have to be set back 5.5 m from the property lines above a height of 20 m from the ground and windows would have to be set back from 5.5m to 13 m. Since the site is only 9 m wide to start with, building above the fifth storey would be impossible.
- However, the above ignores the Financial District exemptions.



21 CARLTON STREET

Zoning

CR L2 U350, Mixed-use Commercial Residential,

Max. density of 4.0 x using the mixing formula,

46 m height limit on Carlton Street and a 12 m height limit on Granby.

Site

This is a 4 400 m² through-site stretching between Carlton Street on the north and Granby Street on the south, east of Yonge Street. Granby Street is within the McGill Granby Area of Special Identity.

Proposal

The proposal is for a mixed-use building with street level retail on Carlton, 9 storeys of office and 9 levels of apartments. There are street related townhouses fronting onto Granby Street.

Implications for the findings of the Daylight View & Privacy Study

Under the current Guidelines:

- It is difficult to determine from the information at hand whether or not the townhouses fronting on Granby Street are single aspect or double. If they are double, then it would appear that the facing distance of ± 10 metres from the north facing windows on the low-rise residential units to office windows on the same lot is insufficient. The resolution would probably be to make the residential units in question single aspect, looking south.
- If the townhouses are single aspect to Granby Street, then there are no implications for light, view and privacy.

Under the proposed bylaw regulations:

- Front on Carlton Street: the proposed 5th storey setback of approximately 4 m would have to be increased to 7.5 m from the property line above the 7th floor.
- Sides: if the commercial storeys have windows to the sides, then the proposed 3 m setback from the property line would have to be increased to 5.5 m for the full height of the building face. If not, then this setback would only be required above a height of 20 m from the ground.
- Courtyard: it is difficult to determine if a courtyard condition exists between the townhouses and the main building block.

40 ALEXANDER STREET

Zoning

Most of the site is CR L2 U150, Mixed-use Commercial Residential, with a max. density of 2.5 x using the mixing formula, and a height limit of 18.3 m. Part of the rear of the site is R3 Z2.5, residential, with a max. density of 2.5 x and a height limit of 30.5 m.

Site

This site is approximately 600 m² in area, found on the north west corner of Church Street and Alexander Street, north of Carlton and it is within the Church Street Area of Special Interest. There is currently a 6 storey commercial and parking building on the site.

Proposal

The proposed building is a ten storey mixed-use building with retail at grade and 108 condominiums above. The combined f.s.i of 5.5 has necessitated an Official Plan application. As part of the application review, the project was judged against the criteria of the Cityplan '91 Sun, Wind and Pedestrian Comfort report which is concerned with the sides of the building facing streets. Church Street is a 5-hour window for sun access, and the proposed building appears not to satisfy this condition. With regards to the courtyard condition however, setback between the building and the north property line is 8 metres for the full height of the building. This satisfies the Toronto Guidelines for the lowest 5 storeys (or 15 m approx.), but above that height, the amount of setback from a primary window to a property line increases gradually to be 15 m at a height of 30 m from the lowest residential floor.

Implications for the findings of the Daylight View & Privacy Study

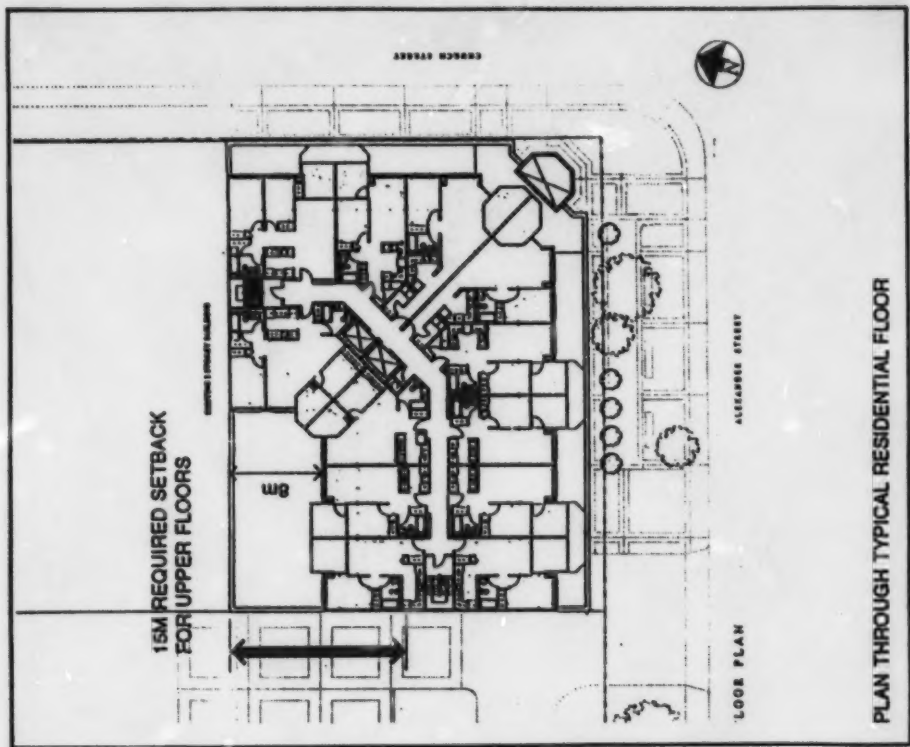
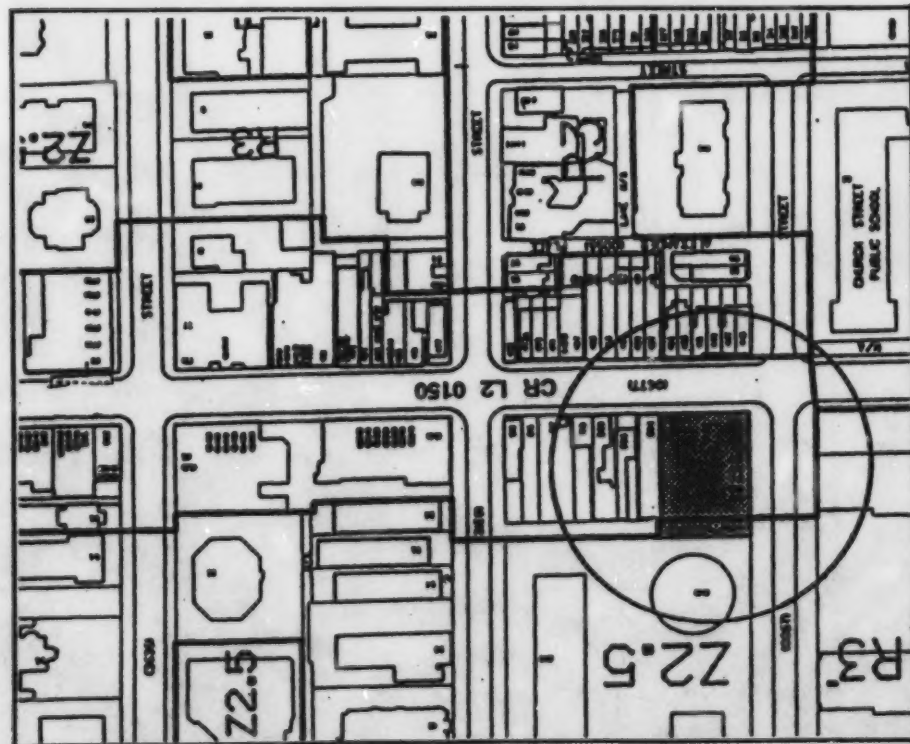
Under the current Guidelines:

- The top 4 or 5 floors of the building would need to be set further back off the courtyard face, with the result that the north-facing units on the west wing would be largely eliminated on these floors. To recoup them, the remainder of the building would have to be 1 or 2 storeys higher to retrieve the lost units and GFA.

Under the proposed bylaw regulations:

- Front: the proposed 3rd storey setbacks of 3 m from Church Street and 4 m from Alexander would be satisfactory generally on Alexander Street, and up to the 9th storey on Church. The 10th storey there, and the top two storeys of the enclosed balconies on both facades would have to be set back slightly more in order to achieve the required 7.5 m setback from the front property line at a height of 35 m from the ground. This is more severe than the current Guidelines which would not impact the front faces of the building proposal.

- Courtyard to the north of the building: This is actually a condition of a setback to a side or rear property line, rather than a courtyard condition for the purposes of the proposed regulations. The proposed setback of 8 m for the full height of the building is ample at the lower levels, but would have to increase at the 9th storey gradually to about 9.5 m at the cornice line. This is less severe than the current Guidelines which would require a 15 m setback.



Zoning
CR L2 U350, Mixed-use Commercial Residential
Max. density of 4.0 x using the mixing formula
45.7 m height limit

Site

This is the site of the former Hampton Court Hotel, on the east side of Jarvis Street, just north of Carlton. The property is flanked on both the north and south sides by apartment buildings which have balconies and primary windows overlooking it, and which are built closer to the property lines than the Toronto Light, View and Privacy Guidelines would allow. Along this stretch of Jarvis, the pattern for apartment slabs is that the ends face the street and the broad-sides face north and south.

Proposal

Since the original proposal for this site was made by the applicants, the Department of Planning has generated several variations of C-shaped, T-shaped and H-shaped buildings to test against a variety of daylight, view and privacy and urban design criteria. The scheme shown to the side is dated June 24, 1991. It is an as-of-right scheme with slab ends facing Jarvis, two low blocks of commercial ground floor development with 5 storeys of residential apartments above, stepping up to a 13 storey slab at the rear of the site. The dimension across the courtyard is 23 metres which satisfies the light, view and privacy guidelines requirement for 15 metres setback up to 15 metres above the lowest residential floor. The setbacks from the street also satisfy the guidelines.

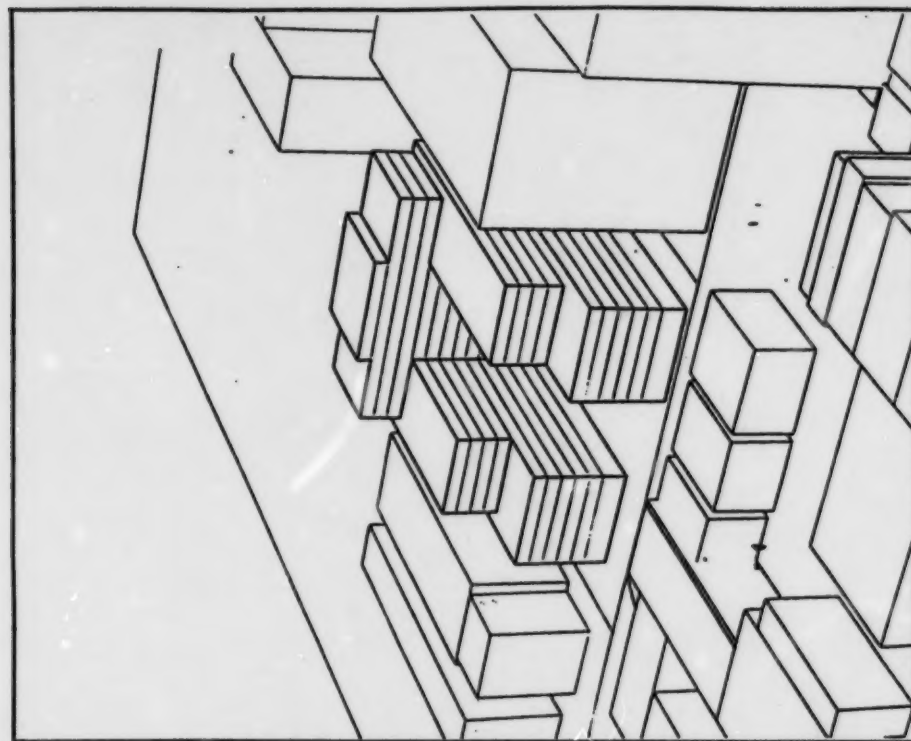
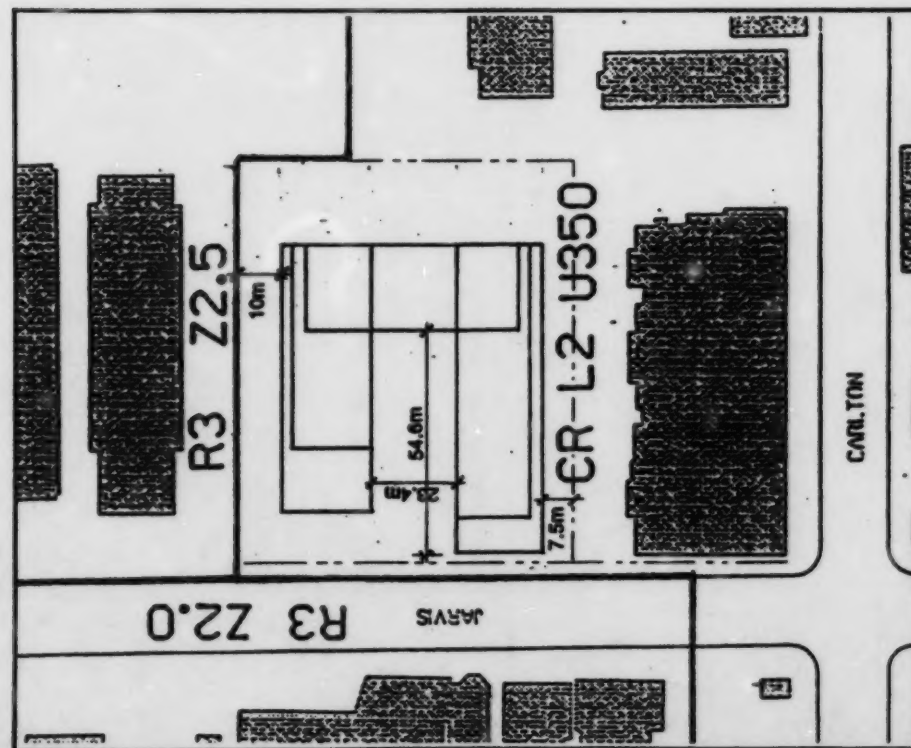
Implications for the findings of the Daylight View & Privacy Study

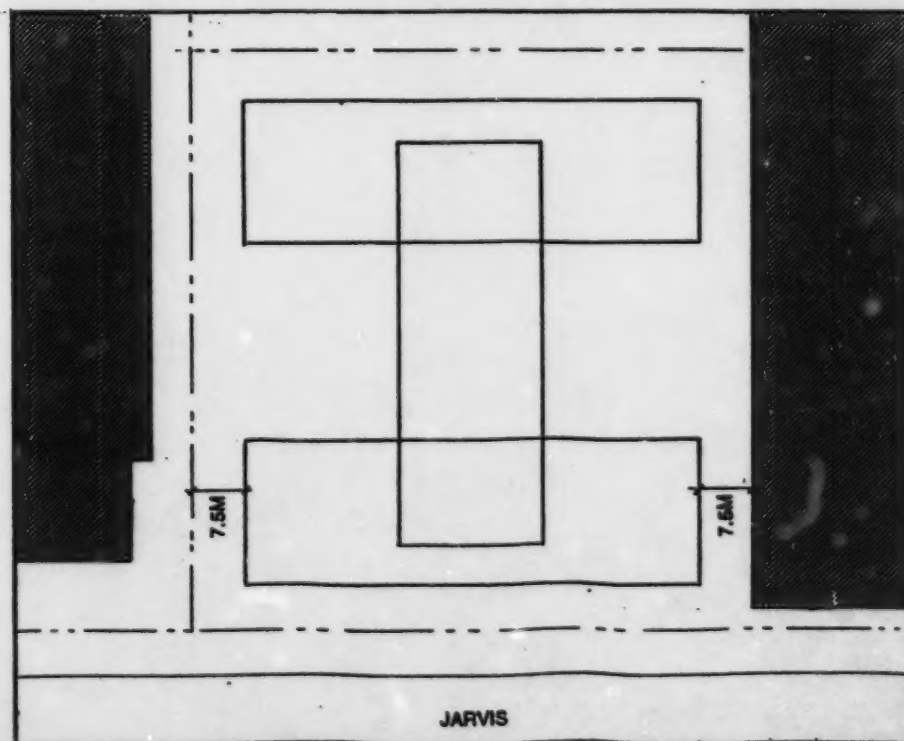
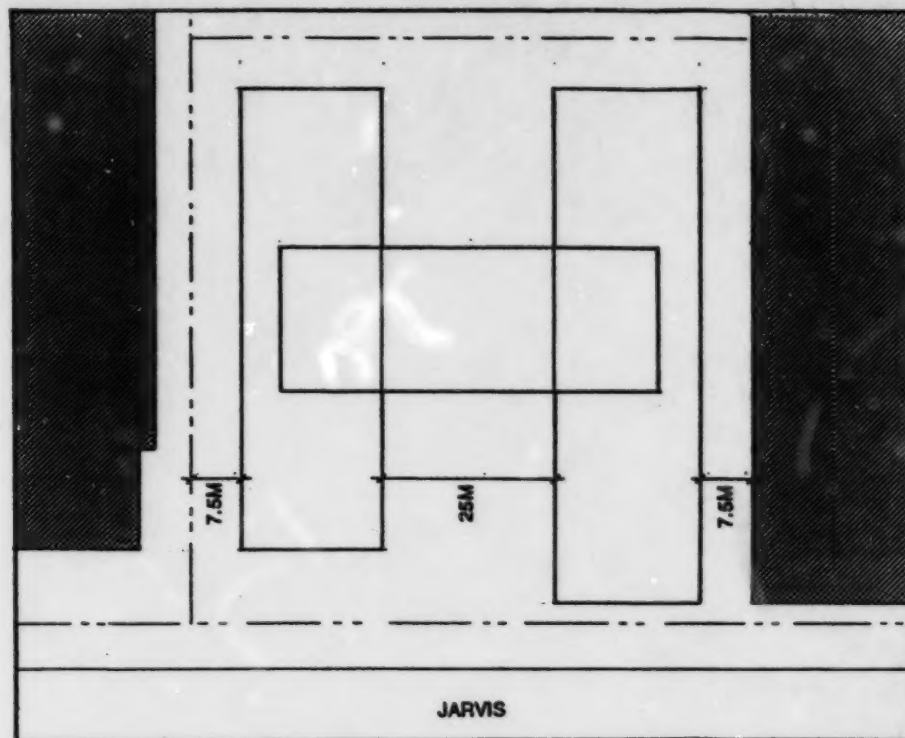
Under the current Guidelines:

- If the "H" is open to the east and west, the outward faces of the north and south bars will have to be set back more than shown on the June 24 option no. 4 shown on the following isometric drawing. The 5 storey base is more-or-less acceptable, but storeys 6 to 9 will be affected. Probably it would make more sense to largely eliminate them, and make the central slab proportionately taller.
- If the "H" is open to the north and south, the ends of the bars will need to be cut back above the fifth floor. Building economics would again likely suggest a simplification of massing with a taller central block.

Under the proposed bylaw regulations:

- none. See the detailed comparison between the current Guidelines and the proposed bylaw regulations applied to this site at the end of Part Three of this report.







Zoning

CR L0.5 U250, Mixed-use Commercial Residential,
Max. density of 2.5 x using the mixing formula,
18 m height limit

Site

This is a 4 640 m² site located on the east side of Yonge Street, north of Blythwood Road, between Eglinton and Lawrence Avenues.

Proposal

The proposal is an as-of-right plan for a six storey building with five storeys of residential condominiums above ground floor street related retail. At the rear of the building, ground related condominiums open onto sunken gardens two storeys below grade. The building is otherwise built up to the height limit. The facing distance from the primary window of those units to the wall is about 9 metres. On the north side of the property, bedroom windows are built to within 4 metres of the property line. The facing building is about 4.7 m from the property line. Similarly, on the south side of the building, bedroom windows are located 4.8 m from the property line and the facing building wall is about 2.5 m from the property line.

2709 YONGE STREET

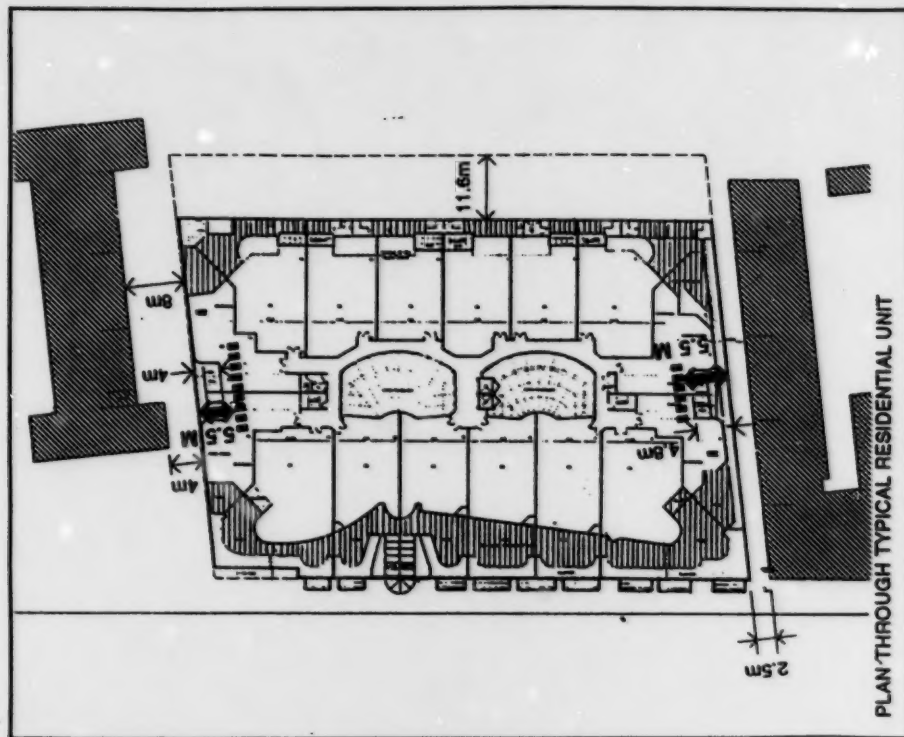
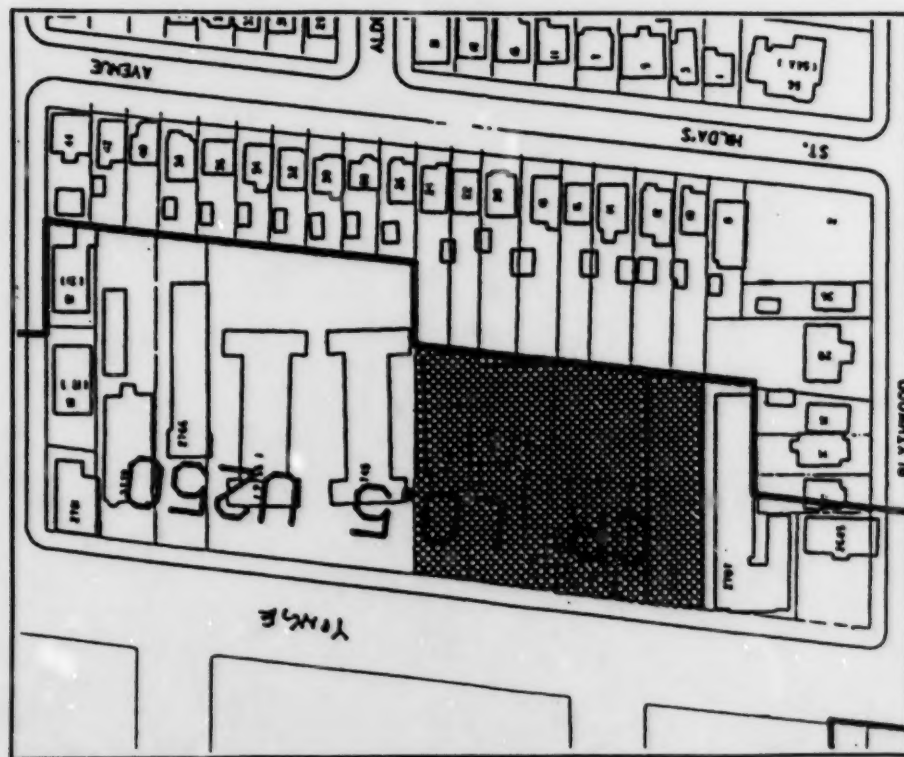
Implications for the findings of the Daylight View & Privacy Study

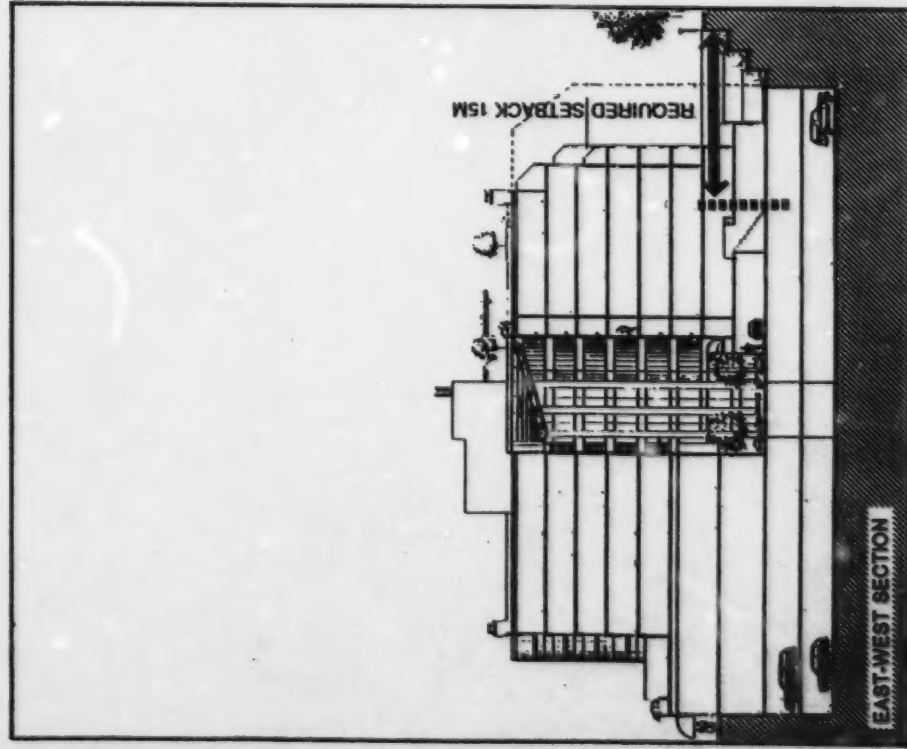
Under the current Guidelines:

- Either reconfigure four end units plus four next-to-end units per floor to eliminate side-yard facing bedroom windows; or make end units bachelors.
- Also, the face of the lowest sunken unit would have to be moved back, and the retaining wall moved out to create the required 1.5 metre "setback from a principal window to a wall".

Under the proposed bylaw regulations:

- Sides: walls with windows to side property lines require setbacks of 5.5 m increasing to 13 m. This would impact on the whole building face rather than only the extent of rooms with windows, as is the case under the current Guidelines.
- Courtyard: the lower (sunken) floors facing the retaining walls would fit into the courtyard category of the regulations which dictates a setback of 11 m to a wall on the same property. Most of this could be achieved by the elimination of the steps in the retaining wall. This is less severe however than the current Guidelines which would require a 15 m setback.





- c) Schemes which require major modification to comply with current Guidelines, as well as with those proposed but which appear to be more-or-less sustainable in a form close to that proposed.

Zoning

CR L1 U350, Mixed-use Commercial Residential
Max. density of 4.0 x using the mixing formula
45.7 m height limit

Site

This is a 435 m² infill site on the south side of Lombard between Church Street and Jarvis Street.

Proposal

The proposal is for an as-of-right 11 storey, 37 metre high building having 14 condominium units on 8 storeys above a 3 storey podium of commercial, parking and rec. space. The podium is built to all the property lines and the apartments above are set back 4.5 metres from the rear property line (the Guidelines report requires a 5.5 metre setback from secondary windows for heights up to 11 metres above the lowest residential floor and a 7.5 metre setback above 15 metres above the lowest residential floor). The apartments are set back from 1 to 3.5 metres from the front property line.

69-71 LOMBARD STREET

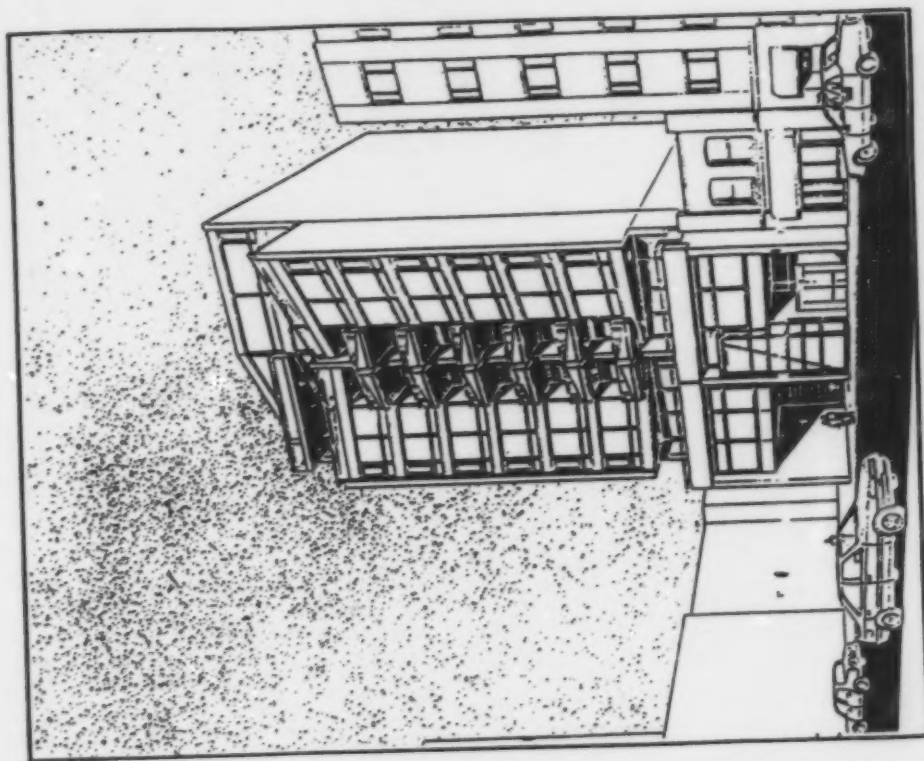
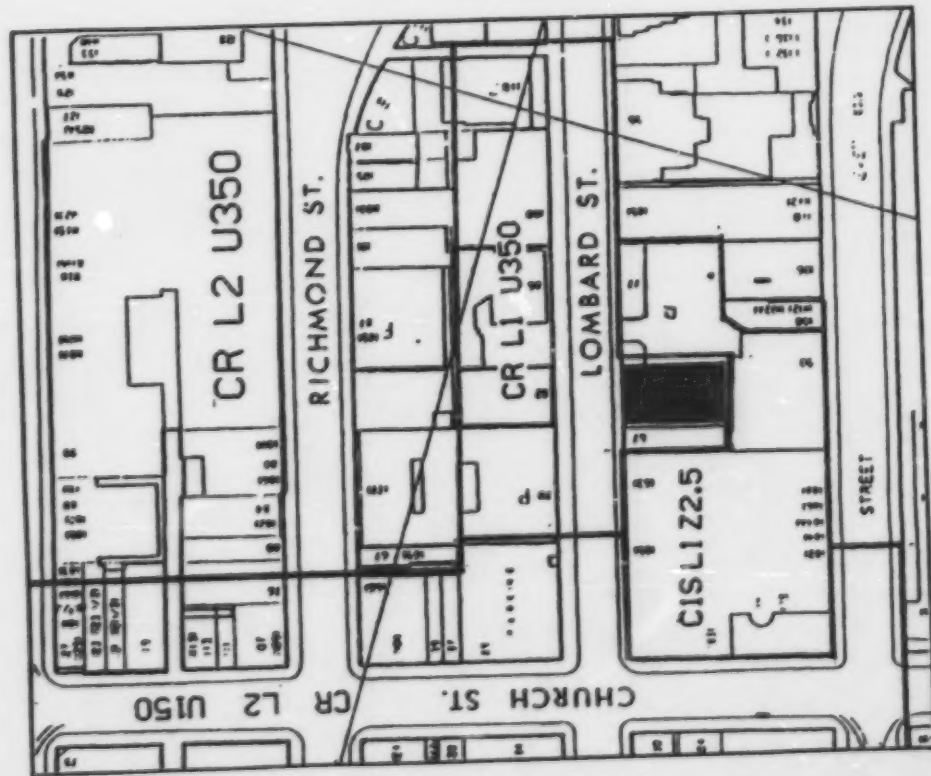
Implications for the findings of the Daylight View & Privacy Study

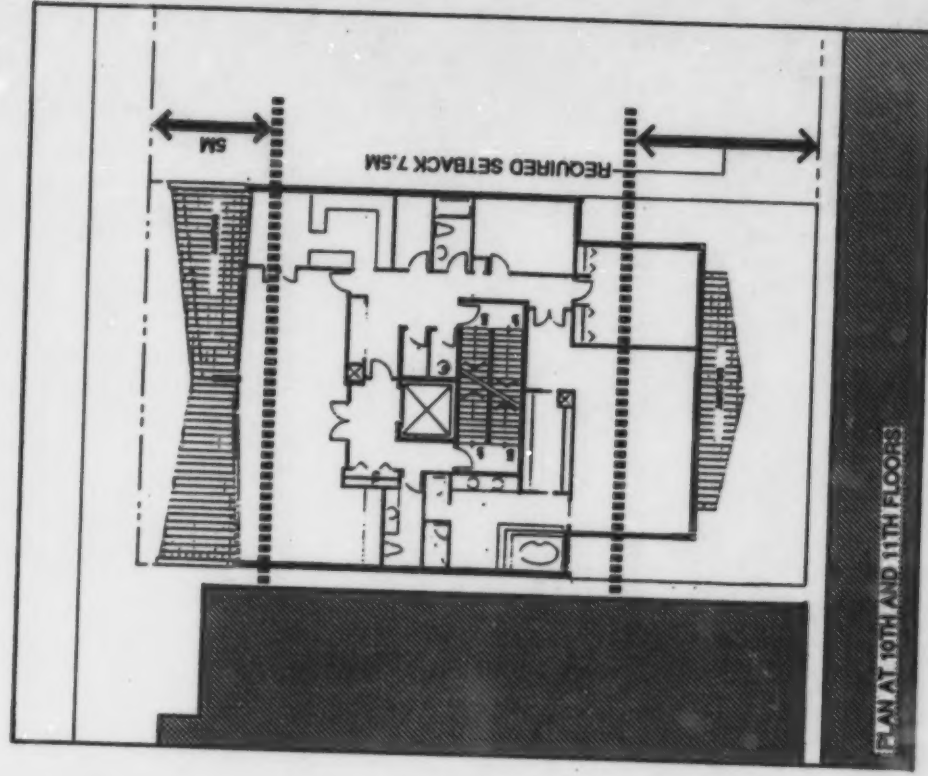
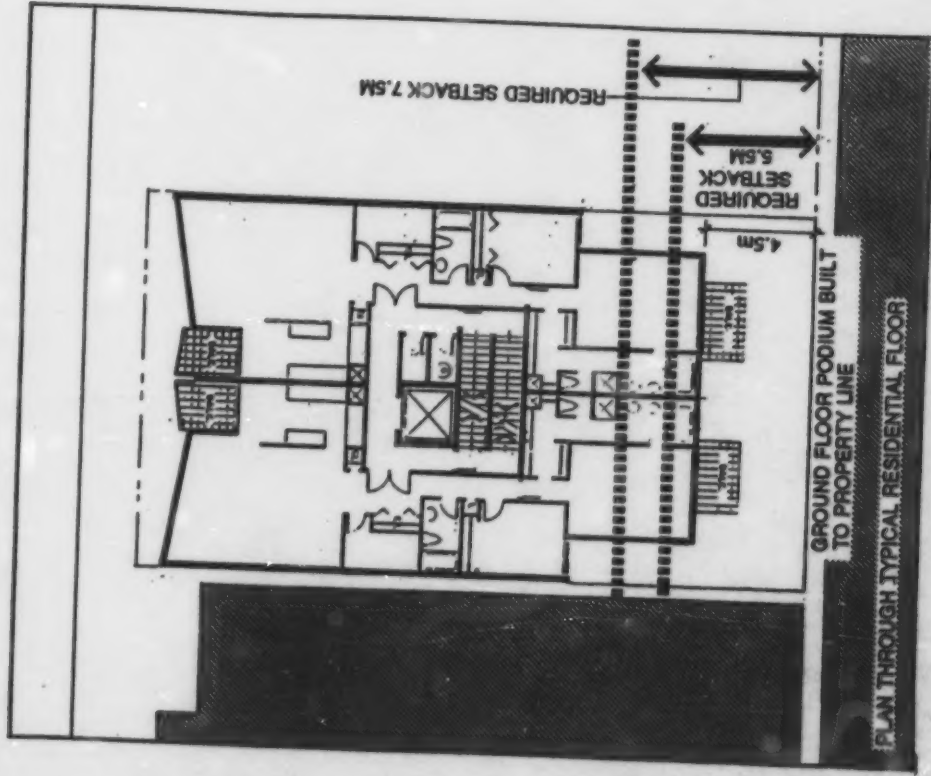
Under the current Guidelines:

- reduces the smaller two bedroom units on floors 4 to 9 to one beds,
 - probably reduces large two bedroom units on floors 10 and 11 to large one beds.
- N.B. One could add three extra floors of height to gain back GFA (2 storey units?) within the existing height limit.

Under the proposed bylaw regulations:

- Front: the 8th through 11th storeys would have to be set back increasingly to a setback of 7.5 m from the property line. This is more severe than the current Guidelines which would require approximately 5 m of setback from the centreline of the street.
- Sides: the blank party walls would have to step back 5.5 m from the property lines above the 7th floor.
- Rear: the proposed 4.5 m setback to the residential portion of the building would have to increase to 5.5 m. Above the 7th storey, the setback would have to gradually increase to about 14 m at the 11th floor.







105 RICHMOND STREET

Zoning

CR L2 U350, Mixed-use Commercial Residential,
Max. density of 4.0 x using the mixing formula,
45.7 m height limit

Site

This is a 443 m² infill site located on the south side of Richmond Street, between Church Street and Jarvis. It is similar in scale and context to the 69 Lombard site.

Proposal

This scheme is very similar to the 69 Lombard scheme. It is an as-of-right proposal for an 11 storey building with 8 storeys of condominiums on a 3 storey non-residential podium. The podium is built to all four property lines and the apartments above are set back 4.5 metres from the rear property line and from 1 metre to 2.5 metres on the front.

Implications for the findings of the Daylight View & Privacy Study

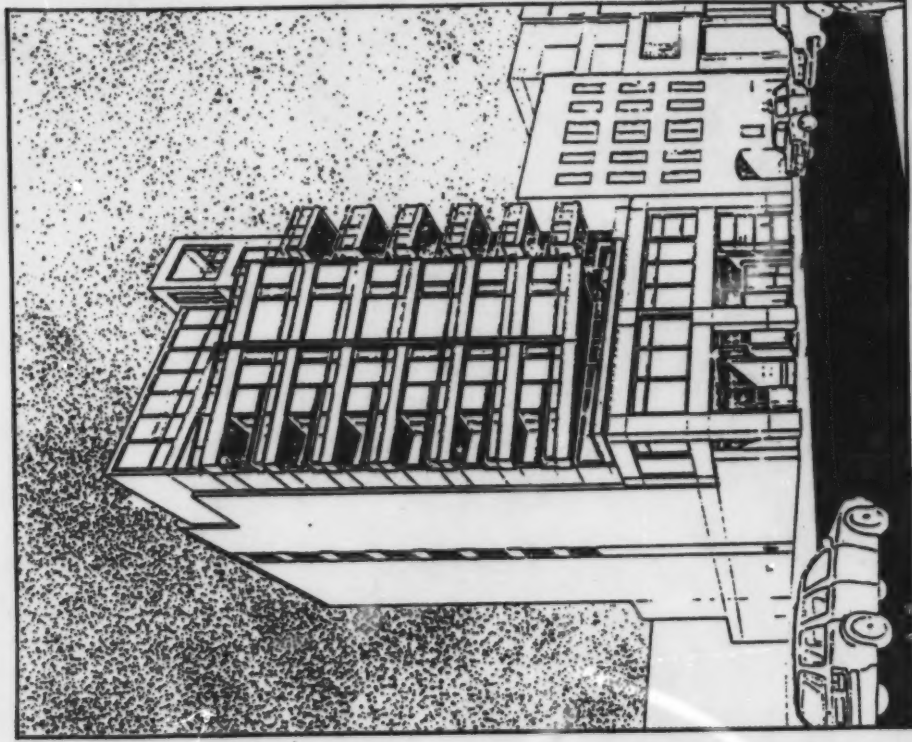
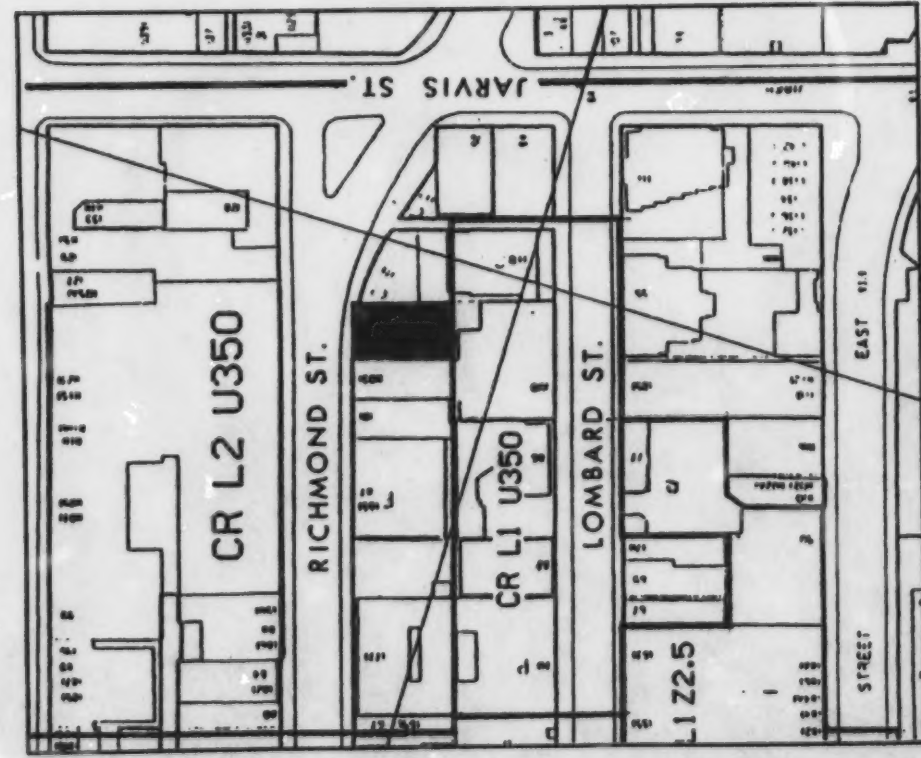
Under the current Guidelines:

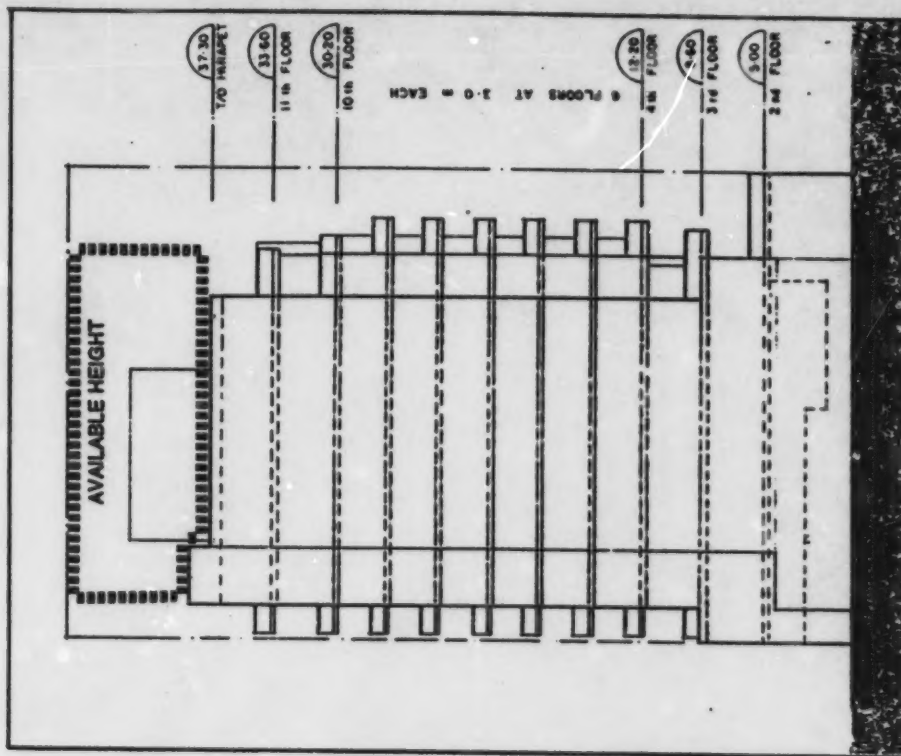
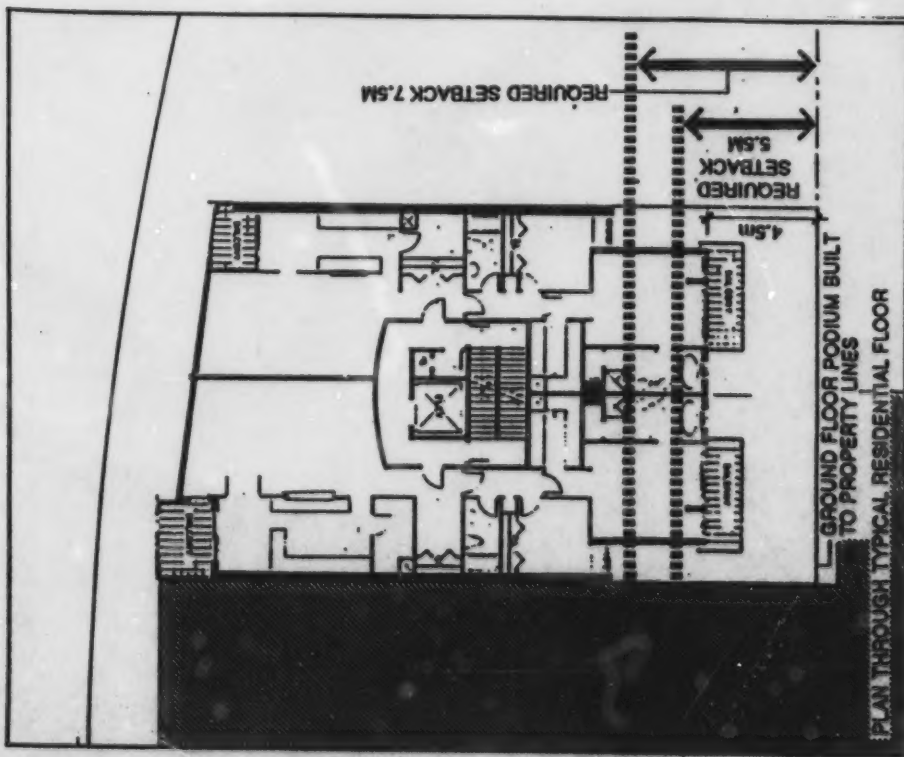
- *reduces smaller two bedroom units on floors 4 to 9 to one beds,
- *reduces large two bedroom units on floors 10 and 11 to units with two smaller beds.

N.B. One could add three extra floors of height to gain back GFA (two storey units?) within the existing height limit.

Under the proposed bylaw regulations:

- *same as 69-71 Lombard Street







4

5-9 SULTAN STREET

Zoning

R3 Z1.0 Residential

Max. density of 1.0 x lot area

11.6 m height limit

Site

This is a 550 m² site on the south east corner of Sultan Street and St. Thomas Streets, which are found south of Bloor Street and west of Yonge. The site is flanked on either side by existing 2½ storey row houses, and on the south side across a back lane by the proposed Jasmac Hotel.

Proposal

The proposed building is a 12 storey building, 36.5 metres high, with retail at grade, and 3 storeys of offices and 8 storeys of condominium apartment units above. The commercial podium is built to the property lines on all four sides, and the front face of the apartments is setback 7 metres. The residential tower rises straight up to the eleventh floor where it begins to step back by about 1 metre on all sides. There are apartment windows on all four sides of the building.

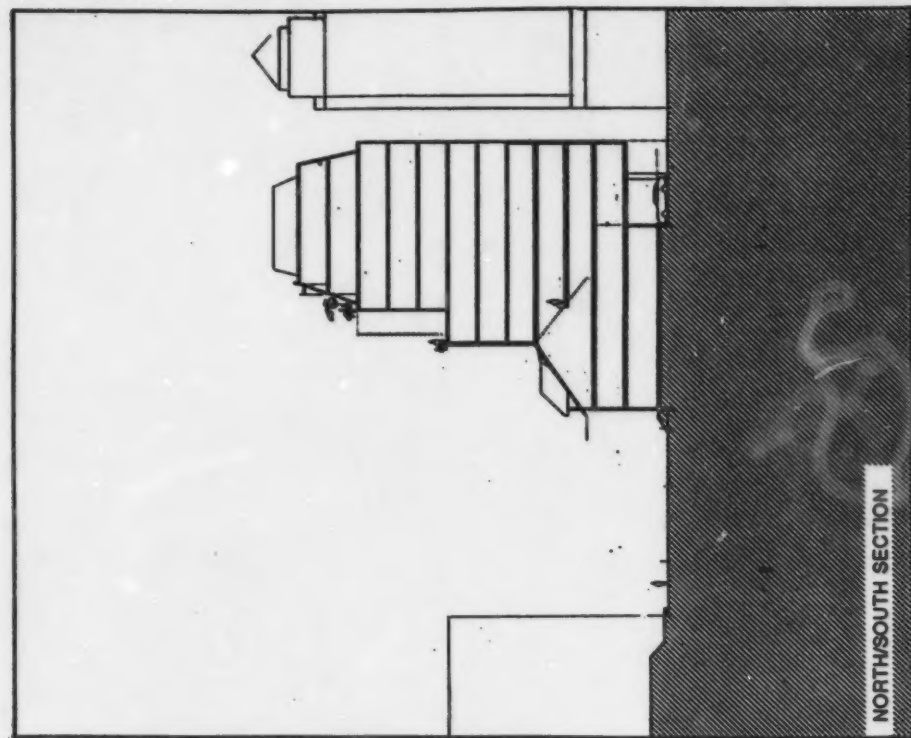
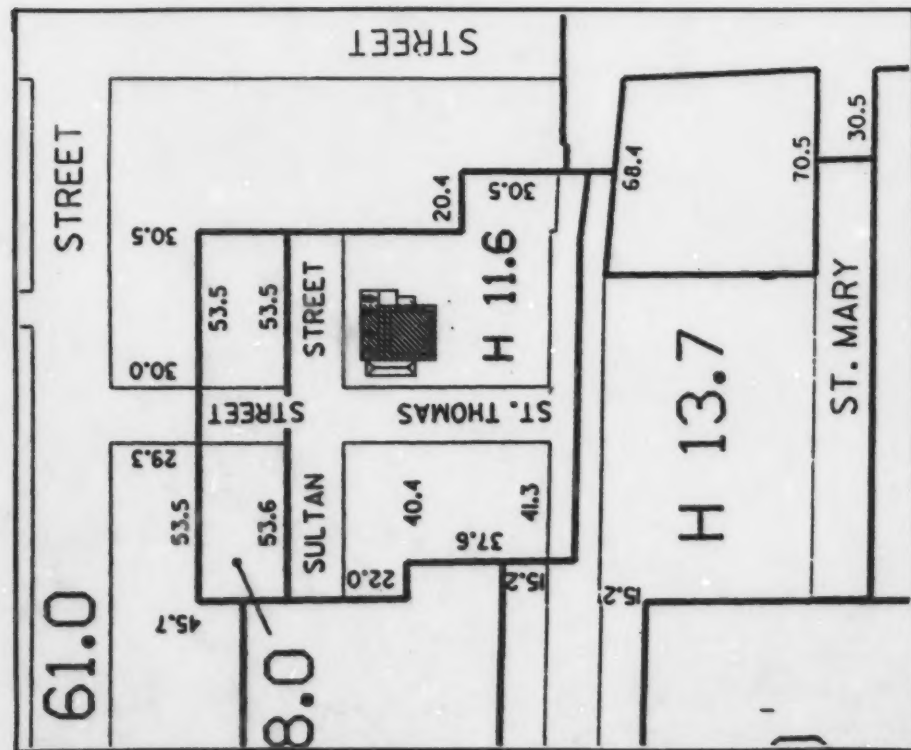
Implications for the findings of the Daylight View & Privacy Study

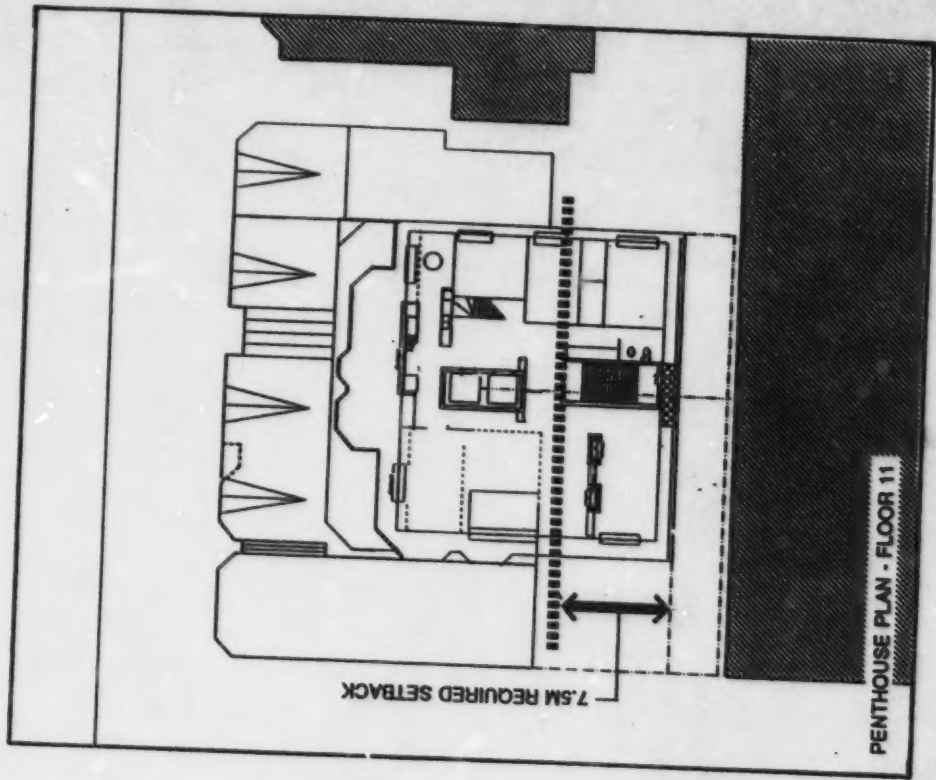
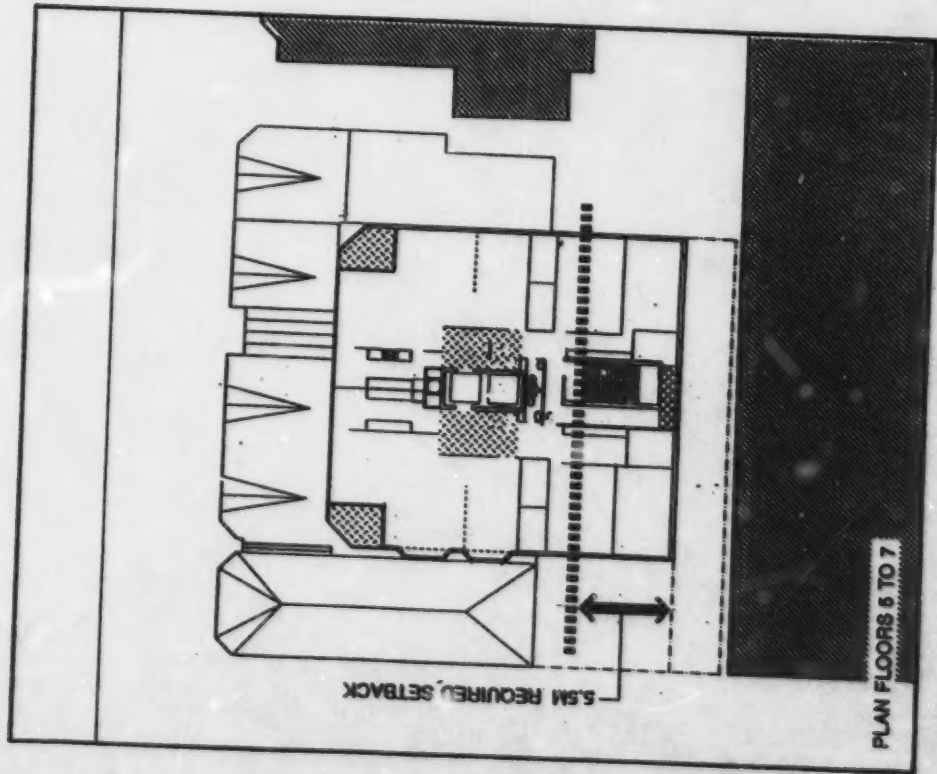
Under the current Guidelines:

- All windows to the sides would have to be eliminated.
- Rear of building for floors 5-10 would need to be setback 5.5 metres making all units one beds instead of two beds.
- Rear of building for floors 11 and 12 would have to be set back 7.5 metres making units approximately 40% smaller.
- Greater height to compensate for these changes in this case does not seem to make economic sense.

Under the proposed bylaw regulations:

- Sides and rear: above the seventh floor the building faces would have to step back from the property lines regardless of whether there are windows or not. Therefore, the fact that the proposal incorporates fire-shutters would not eliminate the need for setbacks.





- d) Schemes which are only able to be sustained, with major modifications and (often) at lesser densities than their proponents have attempted.

300 BLOOR STREET EAST

Zoning

CR L2 U300, Mixed-use Commercial Residential,
Max. density of 4.0 x using the mixing formula,
46 m height limit

Site

This site is found on the north west corner of Bloor Street and Mount Pleasant, flanked by the two towers of the Rosedale Glen apartments to the west which are built nearly to the property line, with blank walls. Other Rosedale Glen building faces with primary windows view diagonally over the proposal site.

Proposal

Following the first Official Plan application, this building was reduced from a 118 metre high, 33 storey building with 114 condominium apartments of an average size of 209 m² and nearly 7 000 m² of commercial space, to a 78 metre high, 25 storey building with the same number of condos and the same amount of commercial space. Rosedale Glen, adjacent, has its north apartment windows oriented diagonally, but the wall built close to the property line is blank. The proposal for 300 Bloor also orients its windows diagonally, generally, to the common property line which alleviates the facing condition. Never-the-less, the points of its diamond plan shapes, if they are glazed, and part of the west face of the building are located too close to the property line to satisfy the Toronto Guidelines.

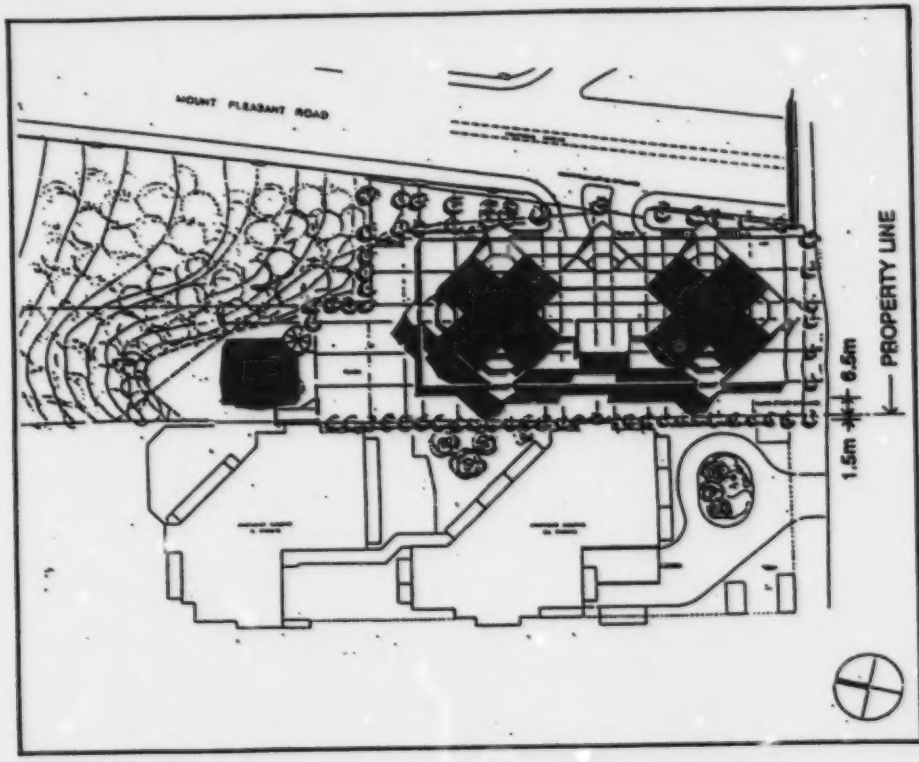
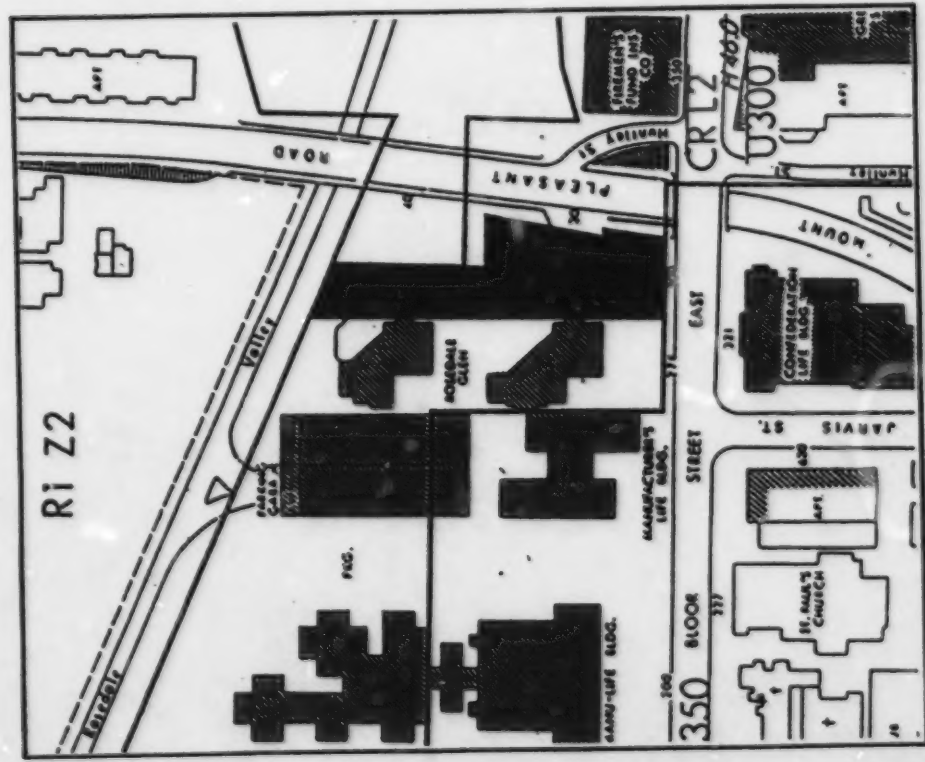
Implications for the findings of the Daylight View & Privacy Study

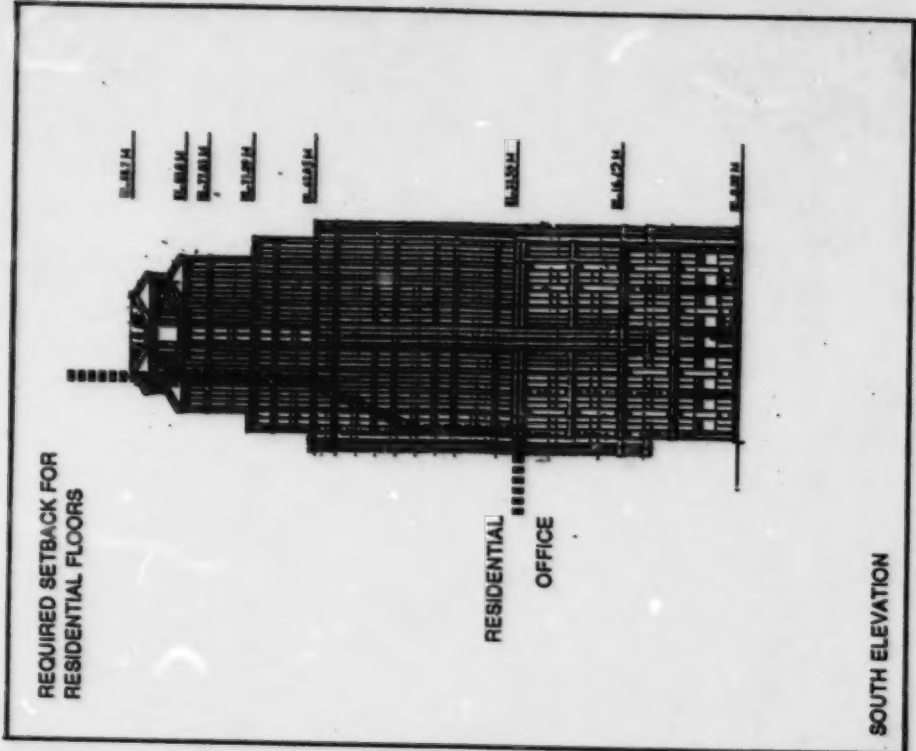
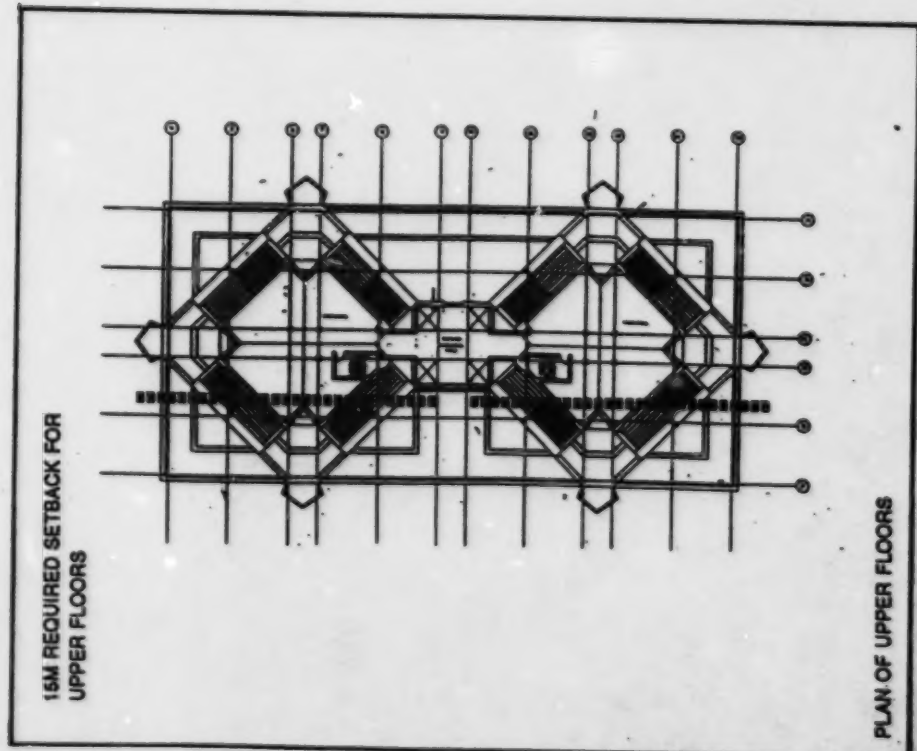
Under the current Guidelines:

- On the west elevation, points of the diamonds, above 32 m height, where the residential floors begin, would have to be cut back almost to the west face of the core part of the building.
- The south and east points of the south tower may also project into the required setback from Bloor St. and Mount Pleasant.
- Together, these would necessitate complete redesign, but to date we do not think it is impossible to do it.

Under the proposed bylaw regulations:

- Side: setbacks would have to be measured perpendicular to the lot line, not to the building face which is the case with the current Guidelines. This difference has a considerable impact which is partly offset by the fact that the magnitude of the proposed setbacks (5.5 m increasing to 13 m) is less than the current Guidelines.
- All setbacks are measured from the ground rather than the lowest residential storey which in this case is the 9th storey. With respect to privacy and daylight for the neighbouring apartment building however, setbacks starting from the ground are more desirable.
- Front: setbacks from the Bloor St. property line would be required above 20 m.
- See the detailed comparison between the current Guidelines and the proposed bylaw regulations applied to this site at the end of Part Three of this report.







30 CHARLES STREET

Zoning

CR L2 U350, Mixed-use Commercial Residential,
Max. density of 4.0 x using the mixing formula,
45.7 m height limit primarily and 11.6 m height limit at either sidewalk.

Site

This is a 3 250 m² through-site stretching from Hayden Street on the north to Charles on the south, just east of Yonge Street. On the south west corner of the site there is an existing 3 storey apartment building which is to remain. The L-shaped proposed building in the remaining area of the site has facing conditions onto two sides of this building.

Proposal

The proposal is for a 45 metre high building consisting of 15 storeys of modest-sized apartments above ground related retail.

Implications for the findings of the Daylight View & Privacy Study

Under the current Guidelines:

- From the north side of the existing building to the south side of the west wing of the new one, the facing dimension appears to be ± 14 metres window to window. This doesn't quite meet the Guidelines.
- From the east side of the existing building to the west side of the new one, the facing dimension is 7.5 metres. It should be 15 m.
- The east facing units are set back 4 m from the lot line. 7.5 m is required for floors 2 to 6 and gradually more up to 15 m for the topmost ones.

- The north face is ± 13 metres from the centreline of Hayden Street. Above the 8th or 9th floor it should increase to 15 metres, up to the 16th floor.

- The effect of complying with the guidelines here would be to eliminate the central section of the north-south building wing, especially above the 6th floor. Also, the upper portion of the east-west wing would have to be shallower. The bldg. is already at the height limit so one could not compensate by going higher.

Under the proposed bylaw regulations:

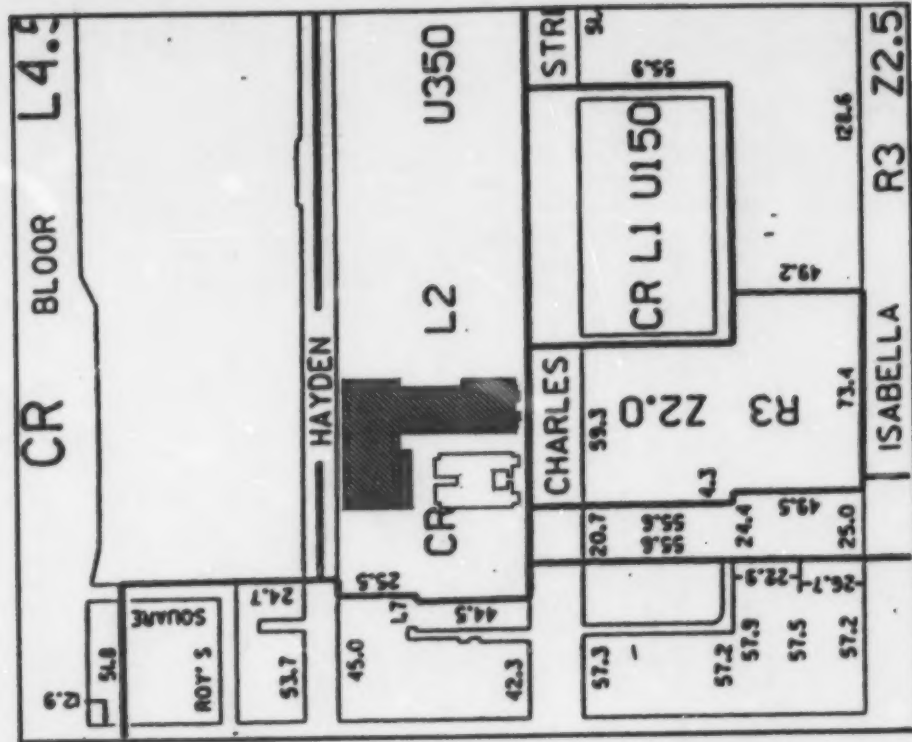
- Sides: above the 7th storey, the blank end walls of the east/west slab are required to be setback 5.5 m.

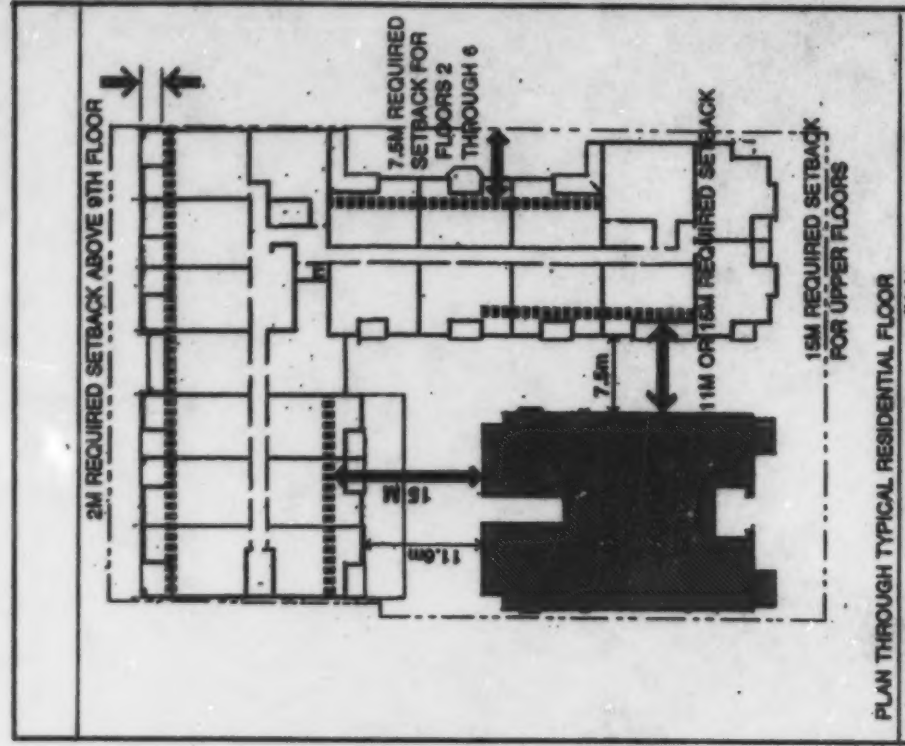
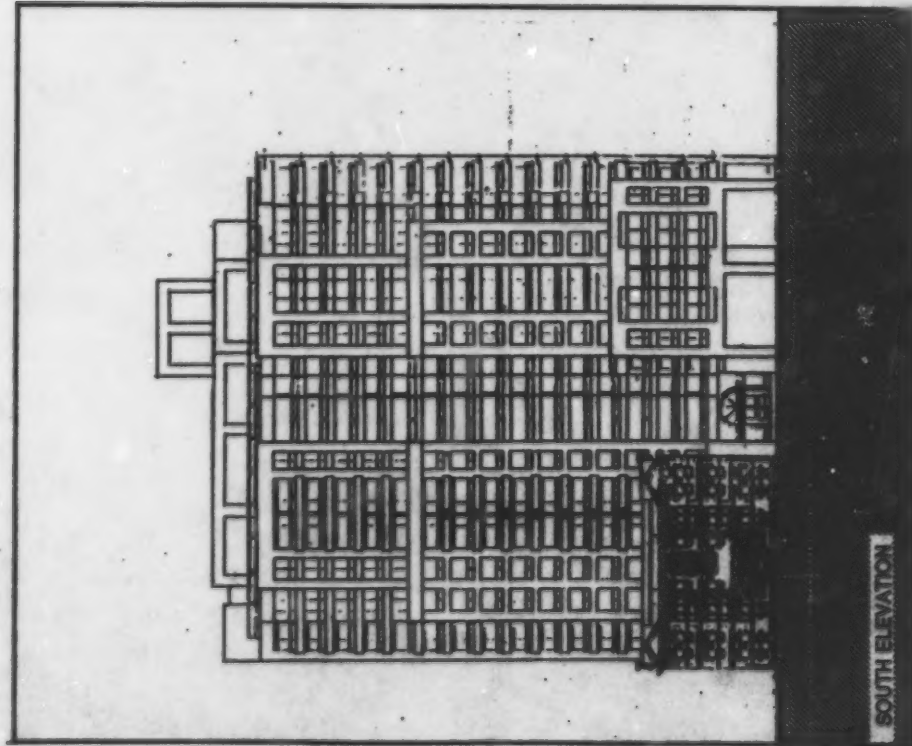
- The proposed courtyard regulation would require a setback of 11 m from a wall with windows to the existing apartment building regardless of whether the proposed building is res. or non-res. Under the current Guidelines it would have been possible to get around the setback requirement to the apartment building by building a non-res. 3 storey base. Under the proposed regulations though a north-south slab would not be possible.

- Front: Because Hayden is a narrow street the current Guidelines' setback from the centreline of the street is fairly severe.

- The local zoning by-law height limits of 11.6 m along Charles and Hayden dictate streetwall height on this site.

- See the detailed comparison between the current Guidelines and the proposed regulations applied to this site at the end of Part Three of this report.





Zoning

CR L4.5 U480, Mixed-use Commercial Residential,
Max. density of 7.8 x using the mixing formula,
76 m height limit

Site

This 4 640 m² L-shaped site is located on the north west corner of Bay Street and Edward Street. It is a very large site and is bisected by Burnaby Place running north south.

Proposal

An Official Plan rezoning application was made to develop this property to 12.0 x coverage with one 26 storey building fronting on Bay Street and a 23 storey building fronting onto Edward. As part of the Planning Department's review of the application, they generated a test scheme at the as-of-right density for comparison. The differences between the two were in tower height, upper level setbacks on Barnaby Place and to a lesser extent, onto Bay Street and Elizabeth Street, and to the setback between the north face of the Elizabeth Street building and the adjacent neighbouring property on the block. The light, view and privacy deficiencies of the 12.0 x scheme are well documented and illustrated in the Urban Design Analysis report prepared for the OMB hearing. The 2.8 x scheme satisfies the requirements of the Guidelines report and the Cityplan '91, Sun, Wind and Pedestrian Comfort report.

636 BAY STREET

Implications for the findings of the Daylight View & Privacy Study

Under the current Guidelines:

- Our review of the case studies has not in this case yielded any implications beyond those the analysis already prepared by the Planning and Development Department has identified.

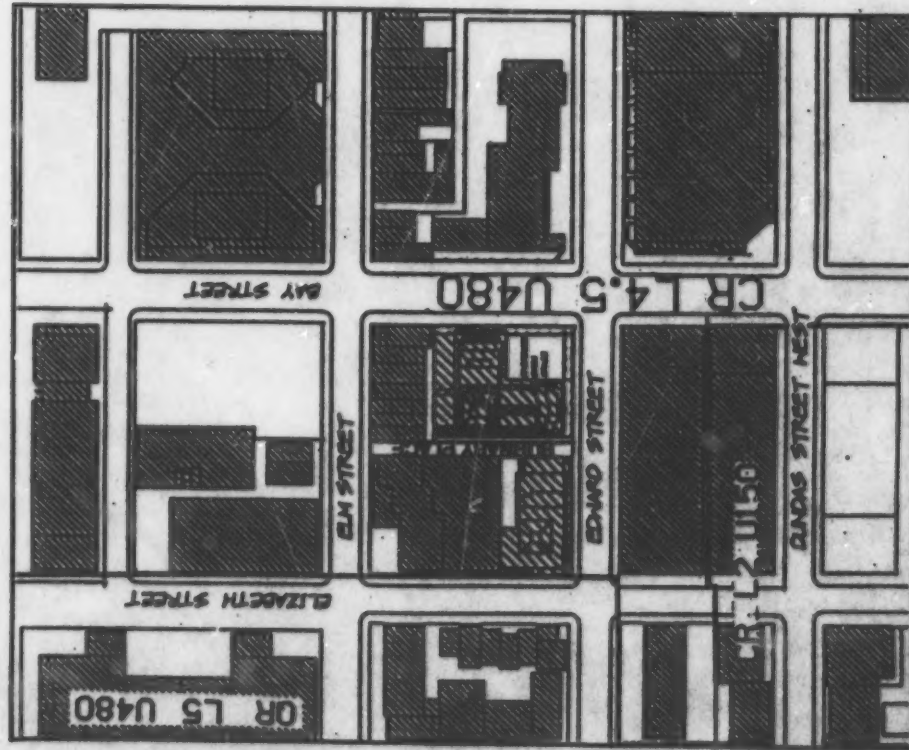
Under the proposed bylaw regulations:

- Frontis: (assuming setbacks from front lot lines apply to both Edward and Bay) setbacks increasing to 7.5 m would be required above a height of 20 m.
- Sides onto the lane: assuming a lane width of 6 m, and upper level setbacks to side property lines of 13 m, the facing distance across the lane would be 32 m. Under the current Guidelines, that facing distance would be 30 m.
- Sides and rear: blank party walls would require setbacks of 5.5 m to adjacent property. This would affect the north faces of the Edward Street and Bay Street blocks.
- The proposed regulations measure height from the ground. The current Guidelines measure height from the lowest residential storey. This scheme has commercial at grade. Under the proposed regulations, setbacks would start after the seventh floor, but under the Guidelines, they kick in after the sixth. Despite this apparent loosening up of the regulations, the compliance of the 7.8 x coverage scheme and the non-compliance of the 12.0 x scheme are not affected.



638 BAY STREET

99



Detailed Alternative Studies

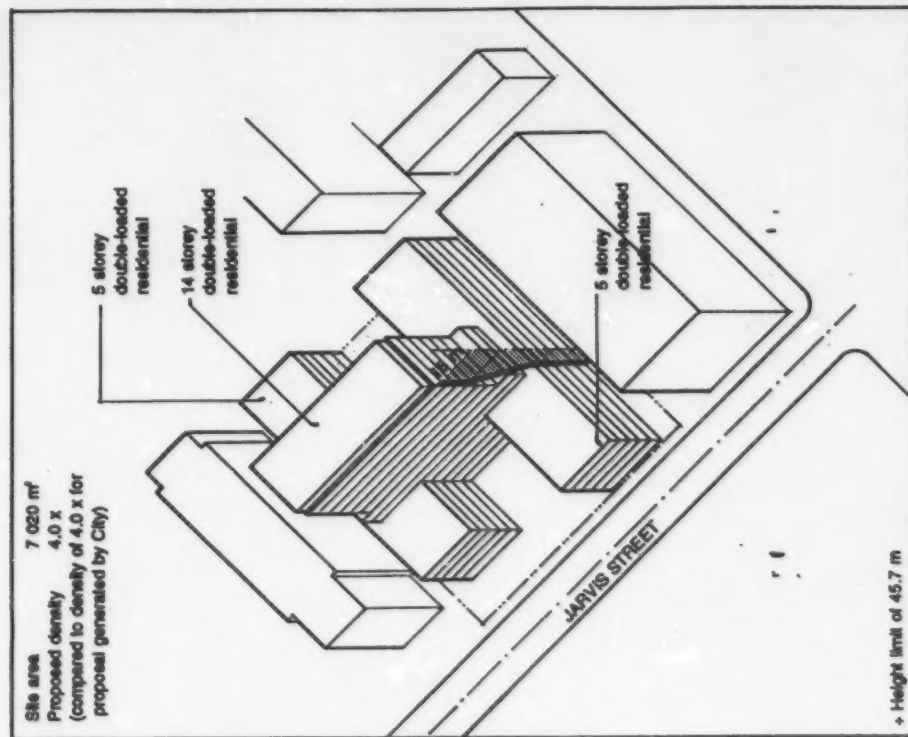
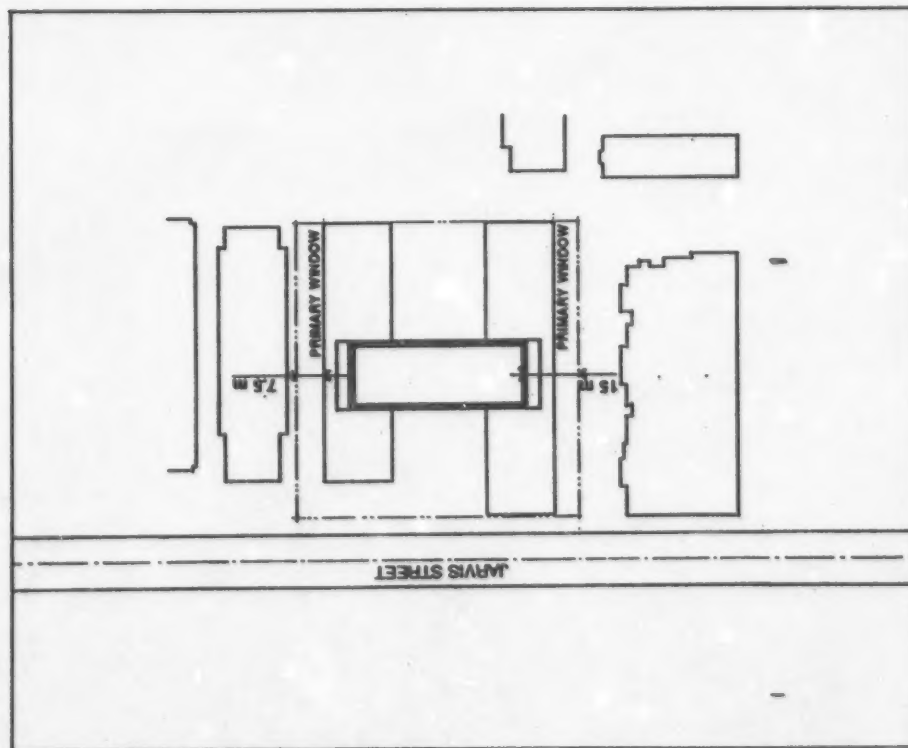
The following pages illustrate the impact that the current light, view and privacy guidelines, and the proposed by-law regulations have on the following sites:

- 415 Jarvis Street
- 30 Charles Street
- 300 Bloor Street East.

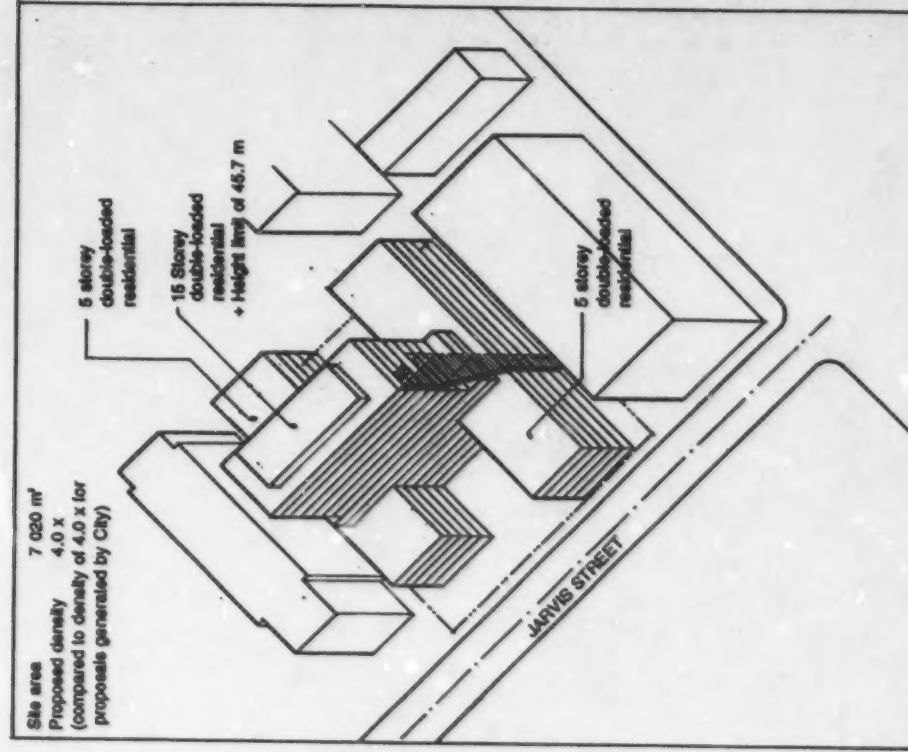
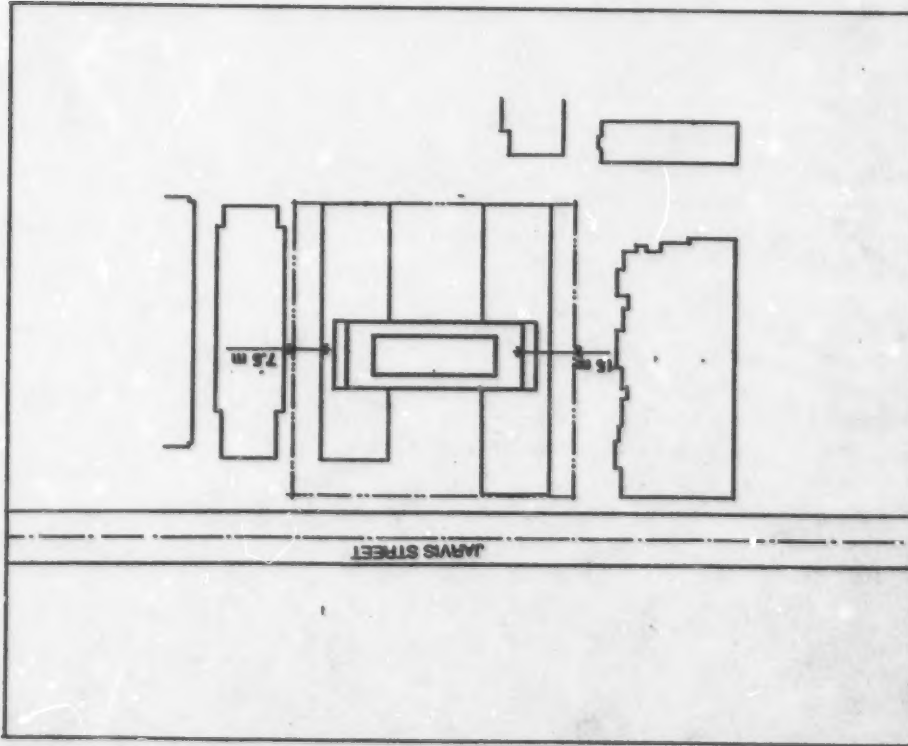
Note: The setbacks applied in this exercise were based on the magnitudes of setbacks in the current Light, View and Privacy Guidelines, that is a setback of 7.5m from a property line up to a height of 15m, setbacks increasing gradually to 15m at a height of 30m, and a setback of 15m for heights above 30m.

The impacts of the proposals made in Part 4 of this report would differ somewhat from what is illustrated here.

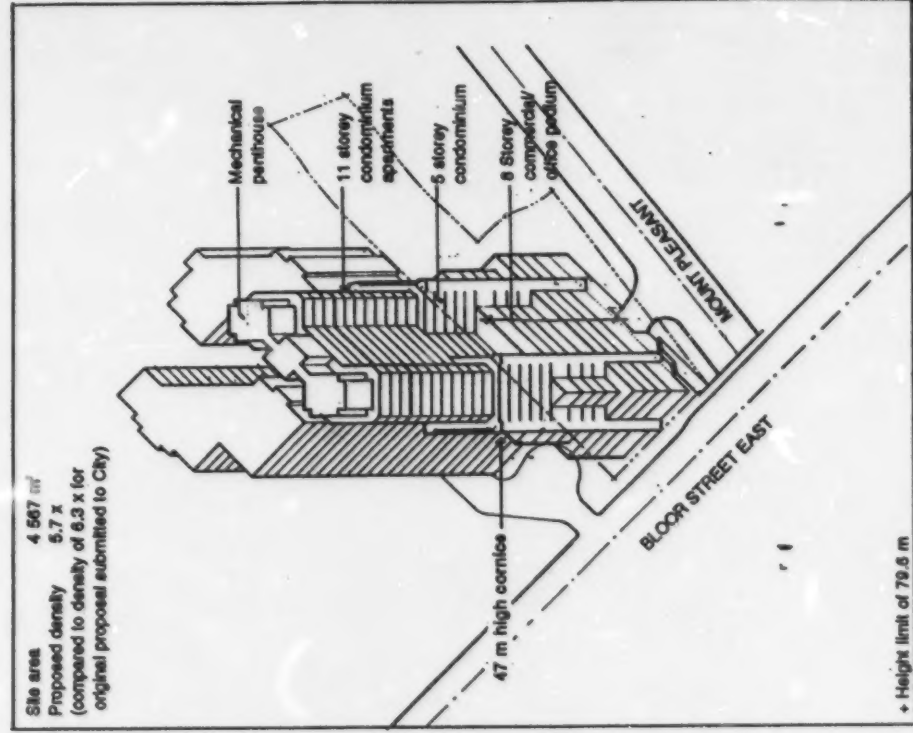
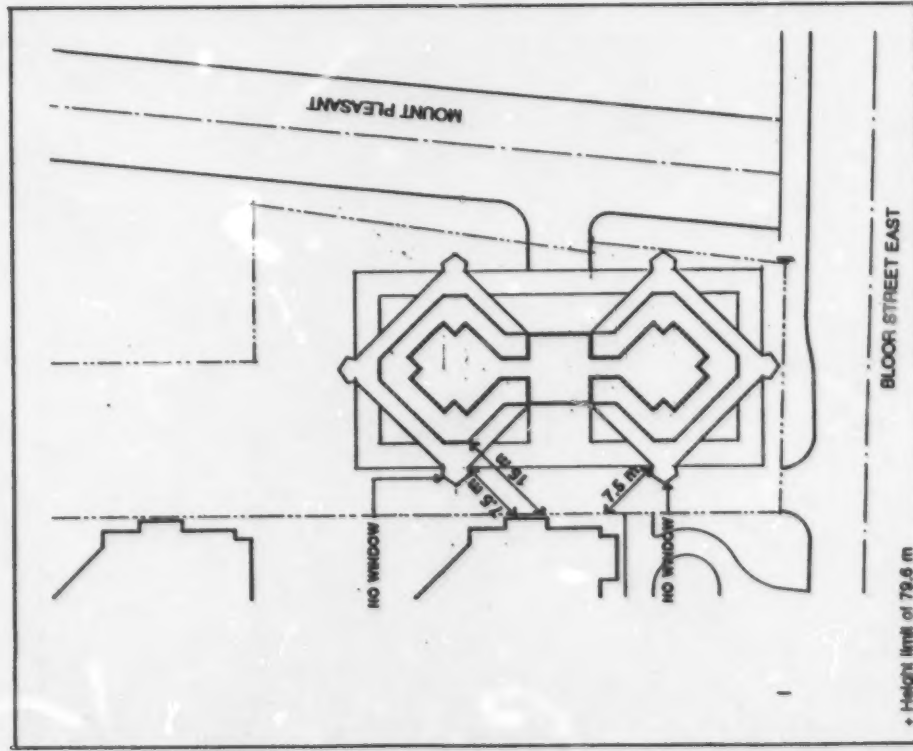
415 JARVIS STREET



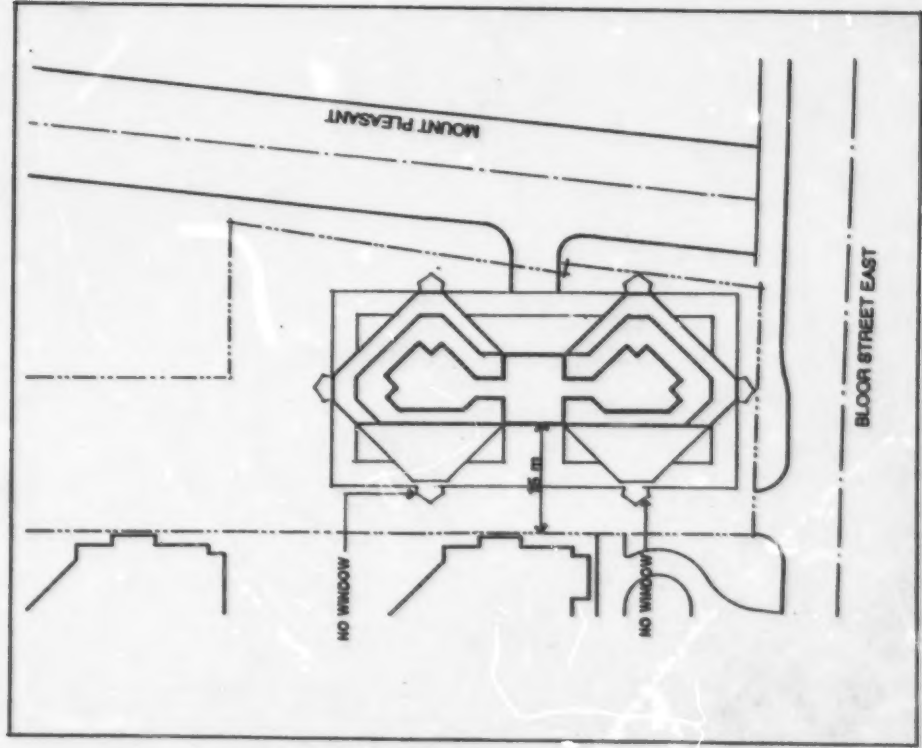
415 JARVIS STREET



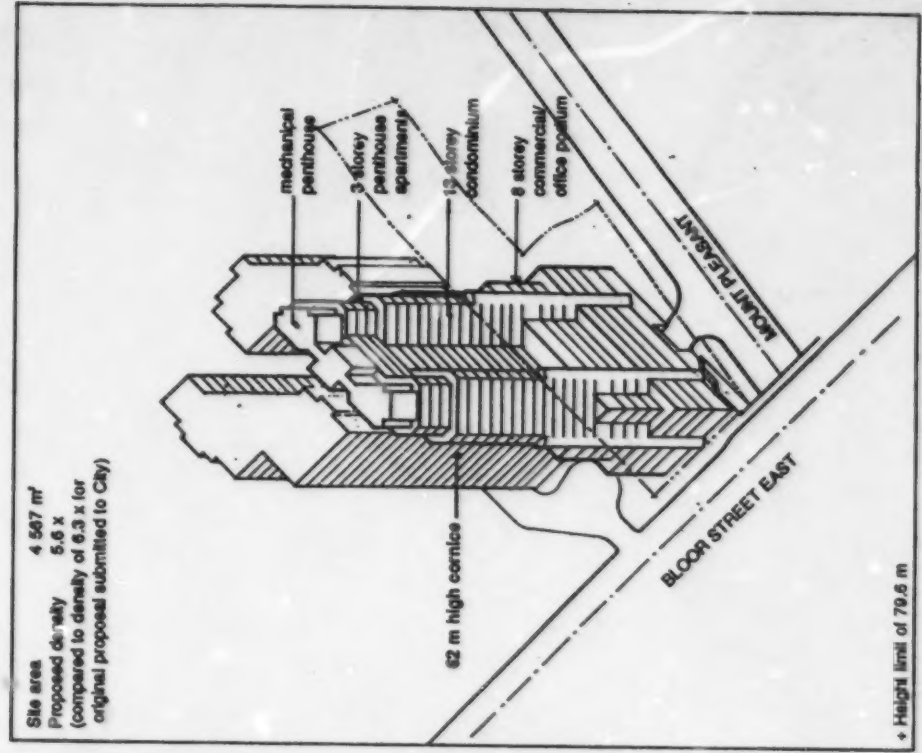
300 BLOOR STREET EAST



300 BLOOR STREET EAST



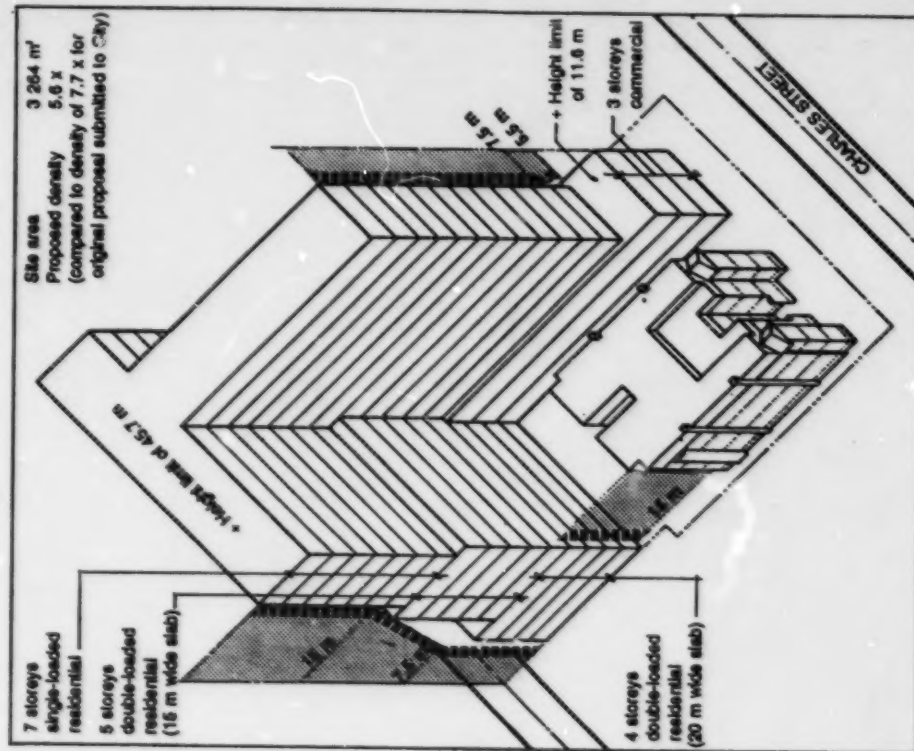
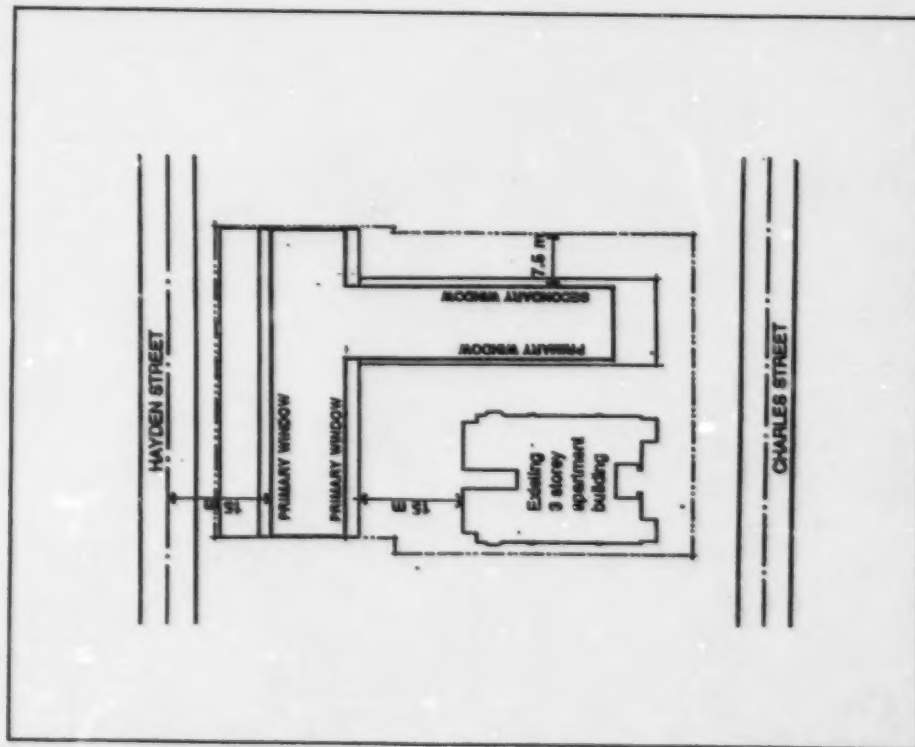
BAIRD / SAMPSON



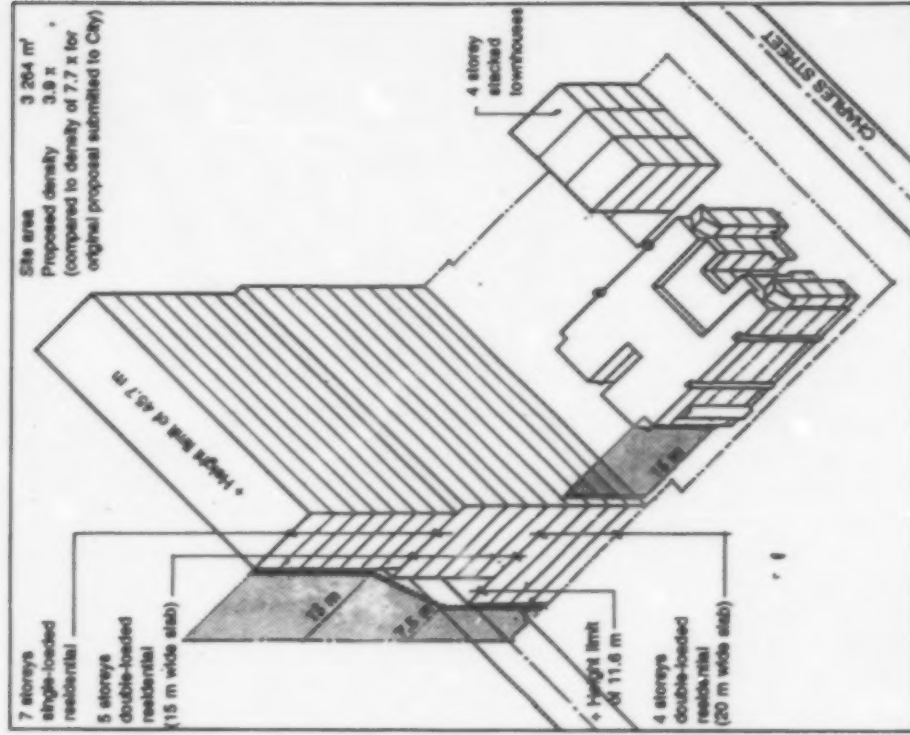
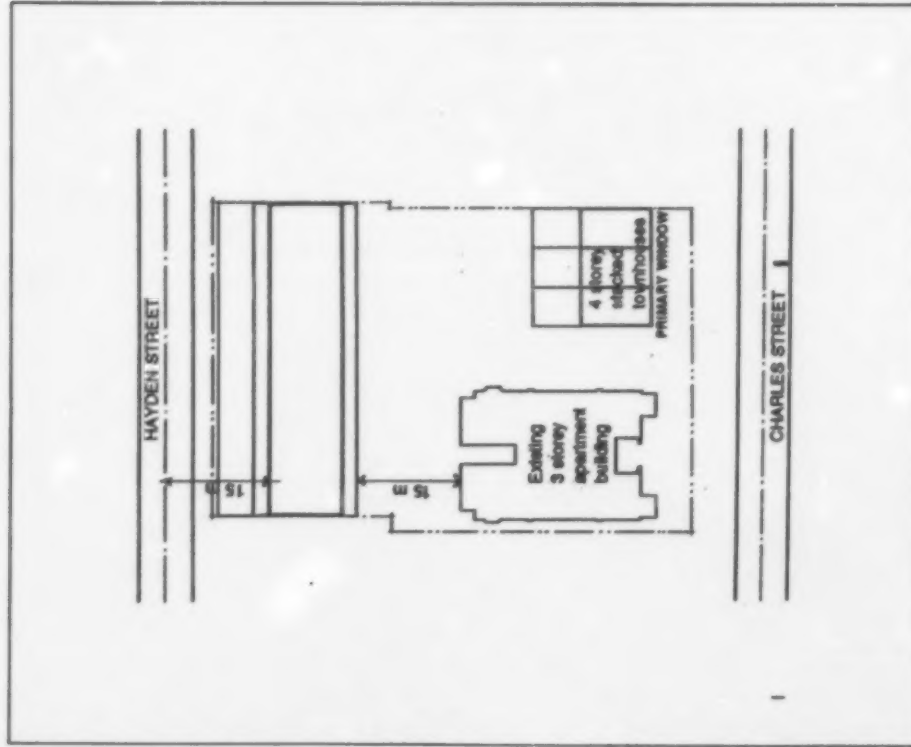
PROPOSED BY-LAW REGULATIONS



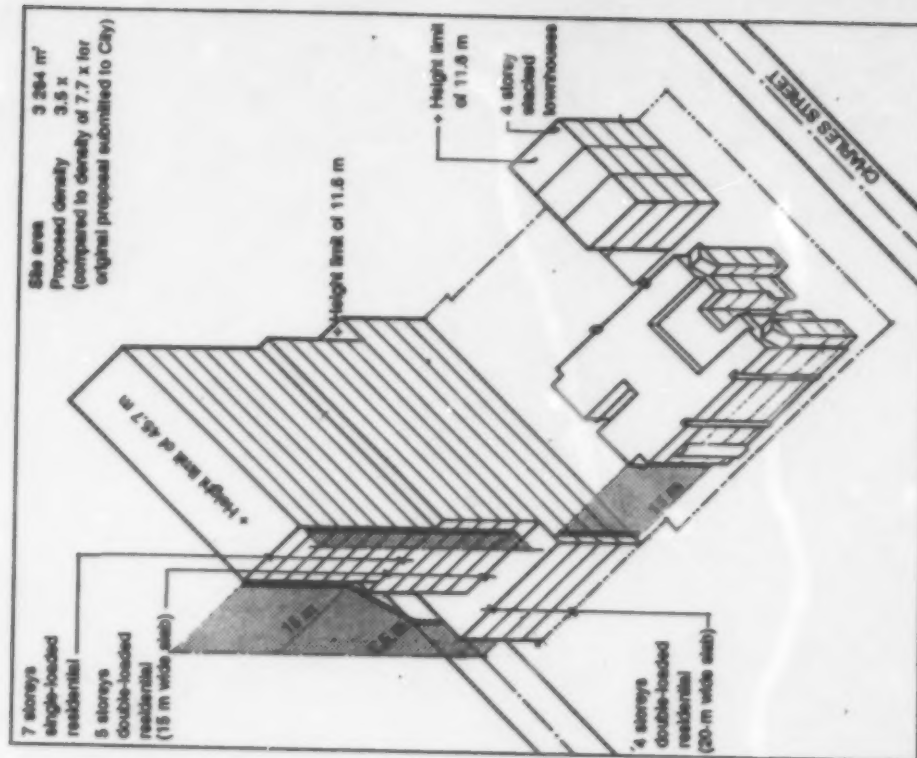
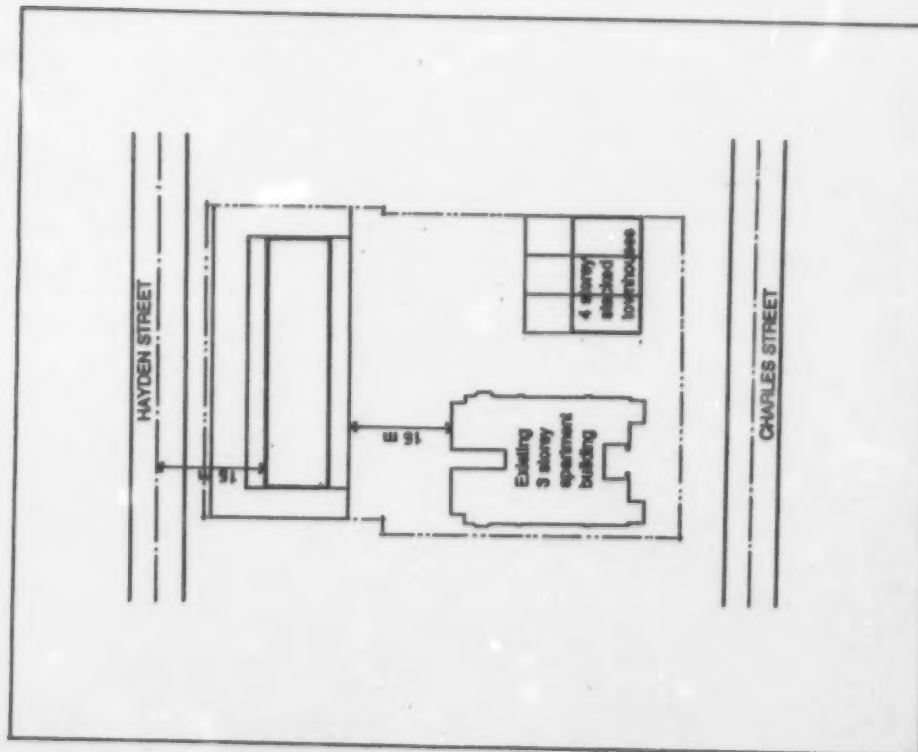
30 CHARLES STREET (MIXED COMMERCIAL/RESIDENTIAL SCHEME)



30 CHARLES STREET (ALL RESIDENTIAL SCHEME)



30 CHARLES STREET (ALL RESIDENTIAL SCHEME)



**PART FOUR CONCLUSIONS, AND
RECOMMENDATIONS**

75

PART 4: CONCLUSIONS AND RECOMMENDATIONS

The work of the study has led us to conclusions in respect to a number of issues which have been reviewed and, following that, to a series of recommendations. Our conclusions are as follows:

"Lot" oriented and "Window" oriented Guidelines

Investigation of other jurisdictions has made it clear that regulations and guidelines concerning the issues of daylight, view and privacy are consistently based either on characteristics and dimensions of the "lot" on which any given building sits, or they are based on the characteristics and positions of a "window" in any given residential unit within any such building. Examples of "lot" oriented regulations are the typical sorts of side and rear yard setbacks which formed part of Toronto's older R1 to R4 residential zoning by-laws. New York City's current regulations also follow the "lot" oriented model.

Probably the definitive "window" oriented set of requirements is CMHC's well-known Site Planning Criteria. These standards were the model on which Toronto's present guidelines on light, view and privacy were based.

We have come to the conclusion that "lot" oriented guidelines are, in the end, preferable to "window" oriented ones. Admittedly, they are less methodologically sophisticated and somewhat cruder in the form of their application than "window" oriented ones such as those of CMHC. But, they are much easier to understand and apply, both in the hands of professionals and lay persons, and they also tend to produce more predictable built-form massings than "window" oriented guidelines do, especially at higher residential and mixed-use densities. On balance then, we think that lot-oriented guidelines or regulations are preferable and have based our recommendations (following) on them.

We have prepared two sets of draft regulations, one set based on the characteristic dimensions associated in the existing guidelines with the less restrictive "secondary" window requirements, and the other set based on the existing "primary" window requirements.

It is important in two regards to note that while larger projects are not impacted by the "primary window/secondary window" distinction (since they invariably have some primary windows on all faces), smaller ones are. Setbacks for 69-71 Lombard and 5-9 Sultan, for example will be affected by the imposition of the more restrictive set.

Science, History and Precedent in the Formation of Guidelines

Our research has yielded almost no evidence of any scientific basis for the quantitative magnitude of guidelines or requirements for daylight, view and privacy in any of the jurisdictions or background studies to which we have referred. Given the relatively variable characteristics of such issues within distinct societies and cultures around the world, this is perhaps not surprising. Concepts of view and privacy as one would encounter them in, say, Hong Kong or Calcutta would vary significantly from those familiar in Toronto.

At the same time that this is true, we have nevertheless been struck by the surprisingly high degree of consistency in the basic quantitative characteristics of the requirements we have found in a range of jurisdictions with much in common, socially and culturally speaking, within Toronto.

Toronto's current guidelines, as well as CMHC's and New York's, for example, manifest similar dimensional requirements for facing distances in a range of conditions. The characteristic limits of up to 15 metres at lower floors, and up to 30 metres at higher floors appear very well established historically. It is thus our conclusion that precedent may well be as strong a

basis for the specific sort of daylight, view or privacy requirement that can be found. Where regulations exist, they typically follow this pattern.

Relationships of New Buildings to Existing Ones

A number of the proposals included in the case studies in Part 3 of this report involve relationships of new to existing buildings. It is sometimes the case that existing buildings have problematic relationships to side or rear lot lines - relationships which can be significantly and potentially negatively affected by the construction of adjacent new buildings. But our work has led us to conclude that it is intrinsically questionable - and even perhaps legally doubtful - to require the designs of new buildings to make good the deficiencies of existing ones, except perhaps, in cases where rezonings are being sought and discretionary planning judgments can be made.

Daylight, View and Privacy Standards in Relation to Residential and Non-Residential Buildings

As the summary of other jurisdictions in Part 2 of this report has already indicated we have found relatively few examples of

daylight, view and privacy standards (save, of course, for the traditional and quite common set-back and height restrictions typical of residential zoning by-laws). It is also true that we have found almost none which regulate non-residential uses, save for those which regulate such uses when they abut to residential uses. We have nevertheless concluded that it is possible to develop a relatively simple set of requirements for such buildings - as they impact on neighbouring buildings only, and these proposed requirements are included in the recommendations which follow.

Explicit definitions will be required for terms "Front", "Side", and "Rear", in reference to Lot Lines

We note that in the "lot" oriented setback requirements we are proposing, definitions of "front", "side", and "rear" as they apply to lot lines will be required. Where parcels have more than one street and/or lane frontage, a determination will be required as to which requirement will apply on each frontage.

In conclusion then, we recommend a relatively simple set of requirements for daylight, view and privacy, adapted from Toronto's existing by-law requirements and guidelines, modified so as to follow a "lot" oriented, rather than a "window" oriented model. Such requirements will constitute a sort of methodological hybrid of New York City's "lot"

orientation and Toronto's current quantitative magnitudes.

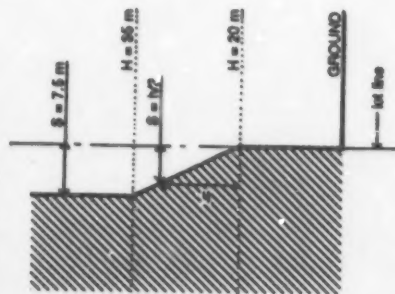
The two charts which follow illustrate versions of two such sets of requirements, the first set - the less restrictive one - based on the current requirements for "secondary" windows, and the second set - the more restrictive one, based on the current requirements for primary windows. Given that it is our recommendation that these requirements be incorporated in the zoning bylaw, it is our recommendation that as a first step, the former, less restrictive set be introduced, and that careful monitoring of their impact be undertaken, such as to lead to an assessment, over time, as to whether or not an even more restrictive set of bylaw requirements ought to be introduced, in which further consideration could be given to the second set.



1 Proposed Daylight, View & Privacy bylaw regulations based on reduced setbacks (5.5 m and 13 m)

RESIDENTIAL (OR "R" COMPONENT OF MIXED-USE)		
Walls	with Windows (A)	without Windows (B)

1. facing FRONT lot line
 1(A) Building face must not penetrate the daylight access cone shown:
 1(B) Refer to 1(A).



H = Height measured from ground level
 h = Height measured from a level 20 m above ground level
 S = Setback, measured perpendicular to the lot line

NON-RESIDENTIAL (OR NON-RES. COMP. OF MIXED-USE)		
	with Windows (C)	without Windows (D)

1(C) No minimum setback.
 1(D) No minimum setback.

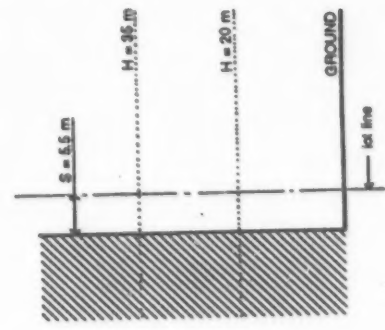
NON-RESIDENTIAL (OR NON-RES. COMP. OF MIXED-USE)		
	with Windows (C)	without Windows (D)

RESIDENTIAL (OR "R" COMPONENT OF MIXED-USE)		
Walls	with Windows (A)	without Windows (B)

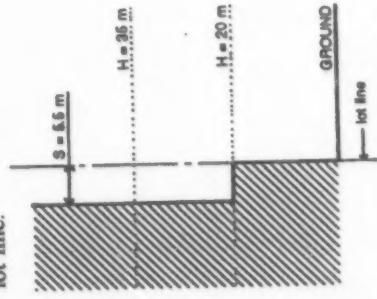
2(D)(i) For a wall facing the rear lot line and that portion of a wall facing a side lot line extending less than 30 m from the front lot line, refer to 2(B)(i).

2(D)(ii) For that portion of a wall facing the side lot line and extending further than 30 m from the front lot line, refer to 2(C).

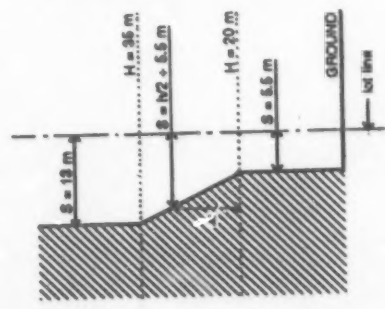
2(C) Building face must not penetrate the daylight access cone shown:



2(B)(i) For a wall facing the rear lot line and that portion of a wall facing a side lot line extending less than 30 m from the front lot line:



2(A) Building face must not penetrate the daylight access cone shown:



2(B)(ii) For that portion of a wall facing the side lot line extending further than 30 m from the front lot line, refer to 2(A).

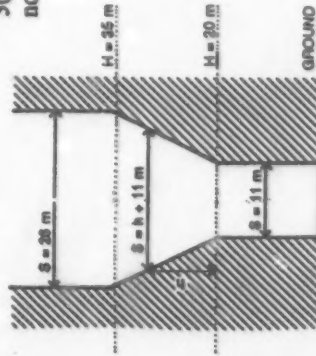
2(B)(iii) For a wall facing property zoned "R", refer to 2(A).

H = Height measured from ground level
h = Height measured from a level 20 m above ground level
S = Setback, measured perpendicular to the lot line

RESIDENTIAL (OR "R" COMPONENT OF MIXED-USE)	
Walls with Windows (A)	without Windows (B)

3. facing a wall on the same property (i.e. COURT-YARD)

3(A) Building face must not penetrate the daylight access cone shown:



The minimum horizontal courtyard dimension measured perpendicular to the setbacks above is 5.5 m.

H = Height measured from ground level
h = Height measured from a level 20 m above ground level
S = Setback, measured perpendicular to the lot line

NON-RESIDENTIAL (OR NON-RES. COMP. OF MIXED-USE)	
with Windows (C)	without Windows (D)

3(C)(i) If the proposed wall faces a residential building face with windows, refer to 3(A).

3(D)(i) If a proposed blank wall faces a residential wall with windows, refer to 3(A).

3(C)(ii) Otherwise, there is no minimum setback.

3(D)(ii) Otherwise, there is no minimum setback.



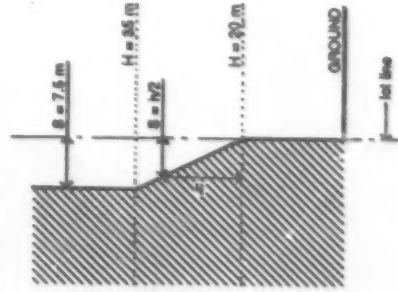
II Proposed Daylight, View & Privacy bylaw regulations based on the current guidelines' setbacks for primary windows (7.5 m and 15 m)

RESIDENTIAL (OR "R" COMPONENT OF MIXED-USE)		
Walls	with Windows (A)	without Windows (B)

1. facing FRONT lot line
 1(A) Building face must not penetrate the daylight access cone shown:
 1(B) Refer to 1(A).

NON-RESIDENTIAL (OR NON-RES. COMP. OF MIXED-USE)		
	with Windows (C)	without Windows (D)

1(C) No minimum setback.
 1(D) No minimum setback.

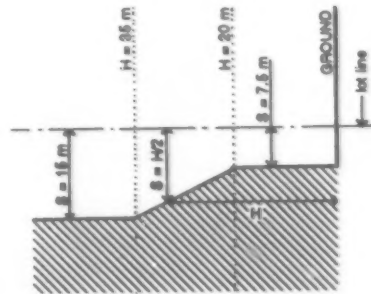


H = Height measured from ground level
 h = Height measured from a level 20 m above ground level
 S = Setback, measured perpendicular to the lot line

RESIDENTIAL (OR "R" COMPONENT OF MIXED-USE)		
Walls	with Windows (A)	without Windows (B)

2. facing
SIDE or
REAR lot
line

2(A) Building face must
not penetrate the daylight
access cone shown:



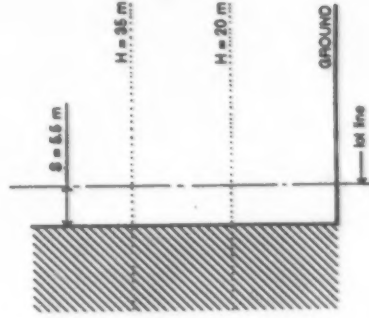
2(B)(ii) For that portion of
a wall facing the side lot
line extending further than
30 m from the front lot
line, refer to 2(A).

2(B)(iii) For a wall facing
property zoned "R", refer
to 2(A).

H = Height measured from ground level
h = Height measured from a level 20 m above ground level
S = Setback, measured perpendicular to the lot line

NON-RESIDENTIAL (OR NON-RES. COMP. OF MIXED-USE)		
	with Windows (C)	without Windows (D)

2(C) Building face must not
penetrate the daylight access
cone shown:



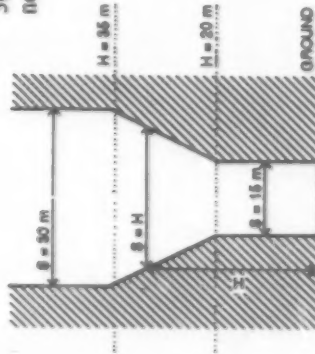
2(D)(i) For a wall facing
the rear lot line and that
portion of a wall facing a
side lot line extending less
than 30 m from the front
lot line, refer to 2(B)(i).

2(D)(ii) For that portion of
a wall facing the side lot
line and extending further
than 30 m from the front
lot line, refer to 2(C).

RESIDENTIAL (OR "R" COMPONENT OF MIXED-USE)		
Walls	with Windows (A)	without Windows (B)

3. facing a wall
on the same
property
(i.e. COURT-
YARD)

3(A) Building face must
not penetrate the daylight
access cone shown:



The minimum horizontal
courtyard dimension
measured perpendicular to
the setbacks above is
7.5 m.

H = Height measured from ground level
h = Height measured from a level 20 m above ground level
S = Setback, measured perpendicular to the lot line

NON-RESIDENTIAL (OR NON-RES. COMP. OF MIXED-USE)		
	with Windows (C)	without Windows (D)

3(C)(i) If the proposed wall
faces a residential building
face with windows, refer to
3(A).

3(D)(i) If a proposed blank
wall faces a residential
wall with windows, refer
to 3(A).

3(C)(ii) Otherwise, there is no
minimum setback.

3(D)(ii) Otherwise, there is
no minimum setback.